Promoting sustainability through customer engagement among sportswear brands: An investigation into CSR and circularity

Dissertation

zur Erlangung des Grades eines Doktors der Wirtschaftswissenschaft

der Rechts- und Wirtschaftswissenschaftlichen Fakultät

der Universität Bayreuth

Vorgelegt

von

Frederic Dreher

aus

Bayreuth

Dekan: Prof. Dr. Claas Christian Germelmann

Erstberichterstatter: Prof. Dr. Tim Ströbel

Zweitberichterstatterin: Prof. Dr. Nicola Bilstein

Tag der mündlichen Prüfung: 18.06.2026

FOR MY BELOVED FAMILY

Table of Contents

Acknowledgements ..... **VIII**

Abstract ..... **X**

List of Tables ..... **XII**

List of Figures ..... **XIII**

List of Abbreviations ..... **XIV**

Chapter 1: Introduction **1**

1.1 Purpose and research aim **1**

1.2 Structure of the thesis **3**
1.2.1 Description of the cumulative approach 3
1.2.2 Research framework of the thesis 4

1.3 Link between research projects **7**

1.4 Statement of authorship **9**

1.5 References **12**

Chapter 2: Theoretical background **15**

2.1 The evolving role of the customer in value creation: from concept to practice **15**
2.1.1 From value consumption toward value co-creation in marketing 15
2.1.2 Customer engagement as an enabler and facilitator of value co-creation 16
2.1.3 Promoting customer engagement through engagement platforms 17
2.1.4 Customer engagement practices 21
2.1.5 References 27

2.2 Customer engagement in the context of sustainability **34**
2.2.1 Customer engagement and corporate social responsibility 34
2.2.2 Customer engagement in the circular economy 37
2.2.3 References 40

Chapter 3: Implications of digital customer engagement for CSR **46**

3.1 How gamified loyalty programs enable and facilitate value co-creation: A case study within a sports-related service context (Research Paper 1) 47
3.1.1 Introduction 49
3.1.2 Theoretical background 51
3.1.2.1 The co-creation of value 51
3.1.2.2 Value co-creation in gamified loyalty programs 52
3.1.2.3 Value co-creation through digital engagement practices 54
3.1.2.4 Linking digital engagement practices to firms' purposes 57
3.1.3 Methodology 58
3.1.3.1 The adidas adiClub 58
3.1.3.2 Case study set up 59
3.1.3.3 Study 1: Netnographic study 60
3.1.3.4 Study 2: Semi-structured in-depth interviews 60
3.1.3.5 Data analysis 62
3.1.4 Findings 63
3.1.4.1 Social networking 63
3.1.4.2 Impression management 65
3.1.4.3 Community engagement 68
3.1.4.4 Community bonding and shaping 69
3.1.4.5 Brand Use 72
3.1.5 Discussion 73
3.1.6 Theoretical contributions 76
3.1.7 Managerial implications 78
3.1.8 Limitations and future research 80
3.1.9 References 81
3.1.10 Appendix 88

3.2 Measuring the effects of engagement in online brand communities on sustainable brand perception along the triple bottom line (Research Paper 2) 90
3.2.1 Introduction 92
3.2.2 Theoretical background 94
3.2.2.1 Customer engagement theory 94
3.2.2.2 Customer engagement in OBCs 95
3.2.2.3 The relation between customer engagement and brand perception 96
3.2.2.4 Customer engagement and brand perception in the context of sustainability 96
3.2.3 Development of hypotheses 97
3.2.4 Methodology 102
3.2.4.1 The adiClub 102
3.2.4.2 Data collection and descriptive statistics 103
3.2.5 Results 105
3.2.5.1 Measurement model evaluation 105
3.2.5.2 Structural model evaluation 107

3.2.6 Discussion 109
3.2.6.1 Theoretical contributions 109
3.2.6.2 Managerial implications 110
3.2.6.3 Limitations and future research 113
3.2.7 References 115
3.2.8 Appendix 120

Chapter 4: Customer engagement for circularity in multi-stakeholder networks ..126

4.1 Customer engagement in circular economy initiatives: Exploring pathways toward climate change mitigation in the apparel industry (Research Paper 3) 127
4.1.1 Introduction 128
4.1.2 Theoretical background 131
4.1.2.1 Customers' positive climate change engagement in the context of circularity 131
4.1.2.2 Conceptualizing customers' engagement in circularity 133
4.1.3 Methodology 136
4.1.4 Findings 144
4.1.4.1 Customer knowledge sharing in the CE 144
4.1.4.1.1 Signaling through transparent information and education of customers . 144
4.1.4.1.2 Networking through workshops and community events 144
4.1.4.1.3 Empowering through close collaboration with customers along the product lifecycle 145
4.1.4.2 Customer resource integration in the CE 147
4.1.4.2.1 Supporting through strong relationships with strategic sustainability partners 147
4.1.4.2.2 Matching using online interactions 148
4.1.4.2.3 Facilitating through convenience and digital tools 149
4.1.4.3 Customer learning in the CE 150
4.1.4.3.1 Convincing through innovation 150
4.1.4.3.2 Entertaining through gamification and incentives as motivational catalyst for learning 152
4.1.5 Discussion 154
4.1.5.1 Theoretical contributions 154
4.1.5.2 Managerial contributions 157
4.1.5.3 Limitations and future research 160
4.1.6 References 163
4.1.7 Appendix 170

4.2 Markenstrategien zum Aufbau einer Kreislaufwirtschaft: Die Relevanz der Wert-Kokreation verschiedener Akteure am Beispiel ausgewählter Fashion-Marken (Book Chapter) 174

4.2.1 Einleitung 175
4.2.2 Relevanz der Wert-Kokreation in einer Kreislaufwirtschaft 176
4.2.3 Fallstudien ausgewählter Fashion-Marken 179
4.2.3.1 PUMA 179
4.2.3.2 H&M 181
4.2.3.3 Patagonia 183
4.2.4 Implikationen aus den Fallstudien 185
4.2.5 Fazit 189
4.2.6 Referenzen 192

Chapter 5: Conclusion 198

5.1 Summary 198

5.2 Theoretical implications 199

5.3 Managerial implications 200

5.4 Future research 202

Appendix: International conference contributions 206

Acknowledgements

"A journey of a thousand miles begins with a single step."
(widely attributed to Lao Tzu)

This quote summarizes well my time as an external doctoral candidate at the University of Bayreuth. From a young age, I have been fascinated by reading books and the skill of writing compelling stories. It was during my teenage years that I made some (unsuccessful) attempts to become a book writer. During the following years, having been busy with graduating from school and later from university, I lost sight of my passion for writing. It lasted until my first year working for Amazon that a single step changed everything. I was on holidays with my family, lying in a hammock in the sun and thinking about my previous achievements and my life goals. My mind wandered towards my passion for writing and how I had briefly thought about doing my PhD from time to time after the completion of my masters. It was at this moment that I decided to give it a try, following my mental model to always do the things you would otherwise regret if you hadn't done them, I set upright and took the first step out of the hammock to tell my parents about my plans, not knowing yet what incredible journey was laying ahead.

I am deeply grateful for having been given this opportunity and I was fortunate to get to know many talented, inspiring and open-hearted people along the way. The possibility to enhance my academic knowledge paired with applying it to exciting projects with partners from the sportswear industry made this journey truly remarkable and unforgettable.

First and foremost, my heartfelt gratitude goes to my principal supervisor Prof. Dr. Tim Ströbel for giving me the opportunity to pursue my PhD at his chair at the University of Bayreuth. I would like to thank him for guiding me throughout the entire journey, starting by defining and shaping the topic of this thesis, brainstorming with me on how to define and

conceptualize projects to address research gaps, revising manuscript drafts many times in an effective and timely manner, and always encouraging me in case of setbacks. Particularly, I would like to thank him for his pragmatic style in guiding this thesis, balancing theoretical rigor in research with sometimes necessary practical simplicity, while acknowledging my limited capacities due to my full-time job.

Next, I would like to express my deep gratitude for my sparring partners, particularly Pascal, Lars, and Matthias for your feedback and constant support. Thank you also to Carmen and Moni, the good souls of our chair, whose kindness and unwavering support made everything so much easier.

Finally, my utmost gratitude goes to my friends, girlfriend, and family. Without you, this journey would not have found its way to completion.

A special mention goes to my mum, dad, sister and grandparents for always being there for me every single day of my life, celebrating successes and happy moments with me and supporting me in challenging times. Your kindness, love and generosity are deeply moving. You mean the world to me and I am eternally grateful for having you at my side. This is for you.

Frederic Dreher

Abstract

This thesis investigates how sportswear brands can promote customer engagement for sustainability, focusing on the domains of corporate social responsibility (CSR) and circularity. Adopting a service-centered perspective, it examines engagement both on digital engagement platforms and in hybrid environments, exploring how brands and customers interact to co-create value for sustainable outcomes. The thesis comprises four interrelated empirical studies, employing a multimethod approach that includes qualitative methods such as netnography and semi-structured interviews as well as a quantitative assessment using structural equation modeling.

The first part of the research addresses CSR as a broader concept at the micro level, focusing on dyadic brand–customer relationships on digital engagement platforms. Paper 1 examines how gamified loyalty programs, using the case of adidas' adiClub, foster customer engagement through distinct practices that align with social, ecological, and economic dimensions of CSR. Paper 2 advances these insights by conceptualizing the adiClub as an online brand community (OBC) and quantitatively analyzing how the identified engagement touchpoints influence sustainable brand perception along the triple bottom line (TBL).

The second part shifts the focus to the meso level, addressing circularity in hybrid environments involving multiple stakeholders. Paper 3 contributes to research by linking circular practices with customer engagement theory. It maps previously identified circular practices to the three customer engagement dimensions of knowledge sharing, resource integration and customer learning, and introduces three new practices based on PUMA's circularity efforts. Paper 4 extends this perspective by examining case studies of PUMA, Patagonia and H&M to show how circular strategies, including take back programs, material innovation and collaborative networks, are implemented in practice through collaboration among multiple stakeholders.

Across all four studies, the thesis addresses the research gap of understanding how brands can promote sustainability through customer engagement. It highlights the interconnected progression from CSR-oriented engagement in digital contexts toward circularity-focused engagement in hybrid, multi-actor settings. The concluding discussion synthesizes the theoretical and managerial implications, outlines remaining gaps, and proposes avenues for future research on customer engagement for sustainability in the sportswear industry.

List of Tables

Table 1.2-1: Scholarly works of this thesis....4
Table 1.4-1: Contribution statement....11
Table 2.1-1: Overview of main contributions to practice theory....25
Table 3.1-1: Overview of the position and business unit by interview partner....61
Table 3.1-2: Social networking....65
Table 3.1-3: Impression management....68
Table 3.1-4: Community engagement....69
Table 3.1-5: Community bonding and shaping....72
Table 3.1-6: Brand use....73
Table 3.2-1: Assessment of convergent validity and internal consistency....106
Table 3.2-2: Assessment of discriminant validity....107
Table 3.2-3: Hypotheses testing....108
Table 3.2-4: Latent variables and related items....120
Table 3.2-5: Descriptive statistics....122
Table 4.1-1: Descriptive statistics from the RE:SUEDE online customer survey....170

List of Figures

Figure 1.2-1: Framework of the thesis 5
Figure 3.1-1: Value co-creating practices and underlying purposes in gamified loyalty programs 76
Figure 3.2-1: Conceptual model of engagement types and their effects on sustainable brand perception 102
Figure 4.1-1: Conceptual model of customer engagement in circular practices - adapted from Hollebeek et al. (2019) and Verleye et al. (2024) 143
Figure 4.2-1: Interaktionen relevanter Akteure in einer Kreislaufwirtschaft 186

List of Abbreviations

AI	Artificial Intelligence
AR	Augmented Reality
AVE	Average Variance Extracted
CE	Circular Economy
CEB	Customer Engagement Behavior
CFI	Comparative Fit Index
CR	Composite Reliability
CSR	Corporate Social Responsibility
DEP	Digital Engagement Platform
DF	Degrees of Freedom
EASM	European Association for Sport Management
EMAC	European Marketing Academy
EP	Engagement Platform
HTMT	Heterotrait–Monotrait Ratio
IRB	Institutional Review Board
KMO	Kaiser-Meyer-Olkin
LP	Loyalty Program
OBC	Online Brand Community
S-D	Service-Dominant
SPT	Social Practice Theory
TBL	Triple Bottom Line
VIF	Variance Inflation Factor
VR	Virtual Reality
WOM	Word Of Mouth

Chapter 1: Introduction

1.1 Purpose and research aim

Value co-creation has fundamentally shaped the contemporary understanding of marketing, emphasizing the active involvement of customers in the creation of value alongside firms (Payne et al., 2008; Vargo & Lusch, 2004). This shift reflects the evolving role of customers from passive recipients of products and services to co-creators in the service delivery process (Brodie et al., 2013). By participating in value co-creation, customers engage in meaningful interactions with firms, enhancing both their experiences and the overall value generated for the brand (Gouillart & Ramaswamy, 2014).

Digital engagement platforms have increased the opportunities for customer engagement. For example, online loyalty programs (LPs) have evolved from simple reward mechanisms into complex ecosystems that facilitate diverse services, experiences, and interactions (Tobon et al., 2020). A prominent aspect of this evolution is the integration of gamification, which uses game-design elements in non-game contexts to enhance customer engagement (Hofacker et al., 2016). Brands such as Nike or Starbucks have demonstrated the potential of gamified LPs to engage customers in co-creation activities (Ramaswamy & Ozcan, 2016). Despite the popularity of these programs, existing research has focused primarily on their design, performance, and technological impacts (Bombaij & Dekimpe, 2020; Hollebeek et al., 2021; Steinhoff & Palmatier, 2016), leaving a significant gap in understanding how gamified loyalty programs enable and facilitate value co-creation.

Online brand communities (OBCs) offer another platform for engagement, fostering value co-creation through interactions between customers and brands, as well as among customers themselves (Gong, 2018). These communities allow brands to cultivate deep relationships with their customers, transcending geographic boundaries and enhancing brand loyalty (Muniz & O'Guinn, 2001; Zheng et al., 2015). Beyond their role in fostering engagement, OBCs play a

critical role in shaping brand perception by engaging customers in active participation with the brand. As brands increasingly focus on being perceived as socially and environmentally responsible, corporate social responsibility (CSR) initiatives have become central to their strategies (Currás-Pérez et al., 2018). Guided by the Triple Bottom Line (TBL) framework, which emphasizes balancing economic, social, and environmental goals, brand activities aim to shape customer perceptions and foster deeper connections with the brand (Carlini & Grace, 2021; Elkington, 1998). However, research on the effects of engagement in OBCs on customers' brand perception along the economic, social and environmental dimensions remains limited.

One concept that builds on the principles of CSR is the circular economy (CE). While CSR focuses broadly on achieving a balance across economic, social, and environmental objectives, the circular economy specifically targets reducing environmental impacts by enhancing resource efficiency and minimizing waste (Kirchherr et al., 2017; Merli et al., 2018). The circular economy promotes a shift from a traditional "take-make-dispose" model to a more sustainable system that prioritizes reusing, recycling, and recovering resources (Frishammar & Parida, 2019; Nußholz, 2017). By adopting circular strategies, firms not only contribute to environmental sustainability but also reinforce their CSR commitments, aligning their practices with broader sustainability goals. Despite the growing importance of CE, many companies struggle with effective implementation, and research on how firms engage customers in circular activities remains scarce (Re et al., 2021). This gap highlights the need for a deeper understanding of how brands can engage customers in circular practices to co-create value and support sustainability.

To address these interconnected research gaps, this thesis seeks to answer the following superordinate research question:

How can sportswear brands promote sustainability through customer engagement in the context of CSR and circularity?

1.2 Structure of the thesis

1.2.1 Description of the cumulative approach

The present thesis is a cumulative work consisting of three empirical research articles that have been published in leading international peer reviewed journals, complemented by one accepted scholarly book chapter and two conference contributions. The cumulative approach enables an in-depth examination of the research topic, with each interrelated study contributing unique insights into different facets of the overarching research question. To ensure methodological rigor in its investigation, the thesis adopts a multi-method approach. It combines qualitative methods, namely semi-structured interviews and netnography, with a quantitative analysis using a structural equation model. Furthermore, to achieve scholarly relevance and quality, journal selection was guided by the VHB-JOURQUAL ranking, the ABDC Journal Quality List, and each journal's impact factor, all of which indicate the academic reputation and influence of the journals. Accordingly, the articles contribute to both high-quality scientific and practical discourse.

In accordance with the University of Bayreuth's commitment to scientific excellence, societal relevance, and international visibility, the research findings of this thesis were presented at two prestigious, international conferences (see Appendix). These presentations aimed to enhance the reputation of the University of Bayreuth while expanding and strengthening the international research network. Each conference submission underwent a double-blind review process and required acceptance from the respective conference scientific committee. Complementing these efforts, a book chapter was authored to derive practical applications from the theoretical foundation established in this thesis, thereby increasing the societal relevance of the research and contributing to knowledge transfer beyond academia.

Table 1.2-1 provides an overview of the research contributions of this thesis, along with their respective rankings and impact factors, where applicable.

Academic contribution	Status	ABDC*	VHB**	Impact Factor
(1) Journal of Service Theory and Practice	Published	A	C	4.4
(2) Social Responsibility Journal	Published	B	C	4.1
(3) Journal of Business Research	Published	A	B	9.8
(4) Springer	Accepted	-	-	-

** ABDC Journal Quality List 2022; ** VHB Publication Media Rating 2024*

Table 1.2-1: Scholarly works of this thesis

Alongside these academic achievements, the research yielded significant practical impact through establishing partnerships with adidas TERREX and PUMA. Findings from the first two papers were regularly discussed with involved managers of adidas TERREX and directly informed adidas Terrex's adiClub strategy, leading to improved member engagement and the introduction of sustainability-focused workshops. The remaining research papers examined how PUMA can foster customer engagement in circular activities. This research collaboration included regular online and offline meetings providing actionable insights for their circular business initiatives. The final presentation to the involved business teams at their headquarters was highly appreciated and influenced future strategic considerations.

1.2.2 Research framework of the thesis

To ensure a systematic and coherent structure, the research studies presented in this thesis are organized within a research framework that integrates two key dimensions: *level of aggregation* and *sustainability context*, each comprising two subcategories. Accordingly, the framework delineates four distinct categories. Figure 1.2-1 illustrates the overall structure of the thesis based on these dimensions, distinguishing between micro and meso as *level of aggregation*, as well as between CSR and circularity as *sustainability context*. Guided by this structure, the research studies are grouped and discussed across two interconnected chapters.

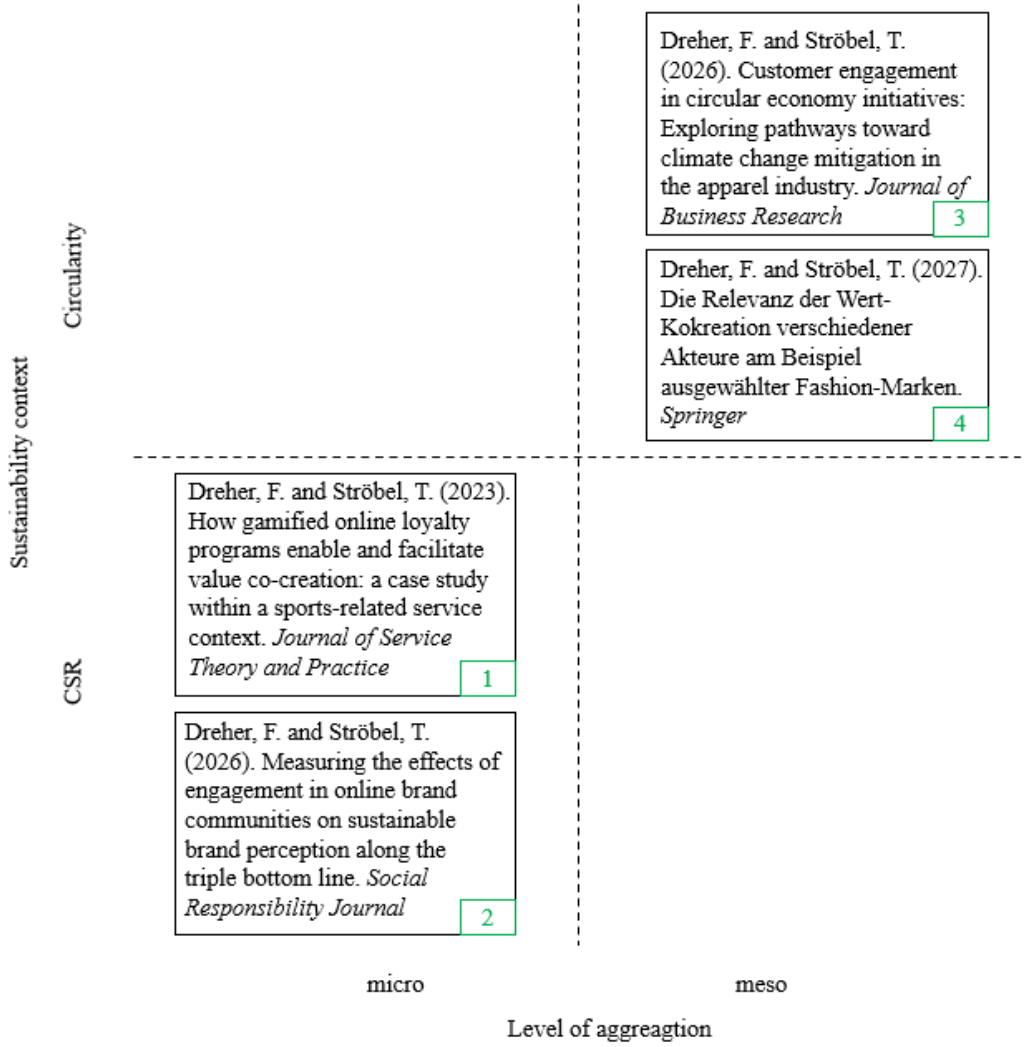


Figure 1.2-1: Framework of the thesis

The first dimension of the framework concerns the *sustainability context*, which differentiates between CSR and circularity. Rather than constituting mutually exclusive research fields, these two contexts represent complementary perspectives on sustainability. CSR reflects a broad organizational commitment to creating social, ecological, and economic value (Carroll, 1979; Kumar et al., 2024). Circularity, by contrast, represents a specific operational model centered on closed-loop systems, resource efficiency, and product life extension (Geissdoerfer et al., 2017; Hankammer et al., 2019). While circularity can thus be understood as nested within the broader sustainability agenda that CSR addresses, it still constitutes a distinct sustainability context for customer engagement. This is because circularity requires concrete operational changes across products, processes, and stakeholder

collaborations (Bocken & Ritala, 2022; Kirchherr et al., 2017), whereas CSR often operates at a strategic and reputational level, shaping how brands articulate and communicate their sustainability commitments (Bhattacharya & Sen, 2004; Du et al., 2011). By distinguishing these two contexts, the thesis captures how customer engagement contributes to sustainability both through broad CSR-oriented strategies that shape brand perceptions across the TBL dimensions (Du et al., 2011; Popoli, 2011), and through concrete circular practices that require operational customer involvement (Angelis, 2018; Bocken & Ritala, 2022).

The second dimension relates to the *level of aggregation*. Exploring more complex research questions frequently necessitates examining phenomena across different levels of aggregation (Woratschek et al., 2020). Typically, levels of aggregation are distinguished as micro, meso, and macro (Storbacka et al., 2016; Taillard et al., 2016). Examining these different levels is important to capture the complexity of engaging customers in ways that enable value co-creation in sustainability contexts.

This thesis focuses on the micro and meso level of aggregation. At the micro level, the analysis focuses on individual and dyadic interactions between customers and brands. Papers 1 and 2 explore how digital engagement platforms can facilitate customer engagement, enabling brands to achieve their CSR-related goals through value co-creation and shaping customers' brand perception. At the meso level, the scope broadens to encompass interactions within brand ecosystems that involve multiple stakeholders, including customers, business partners, and institutional actors. The decision to move to the meso level was motivated by insights from PUMA's circularity projects, which revealed that implementing effective circular business models requires coordinated efforts among diverse stakeholders rather than isolated interactions. Therefore, Papers 3 and 4 explore how brands collaboratively design and implement circular strategies through stakeholder engagement, highlighting the collective dynamics that underpin circular business models and their potential to achieve systemic change

(Frishammar & Parida, 2019; Verleye et al., 2024). In this way, the thesis illustrates how interactions extend from individual and dyadic relationships to broader networks that shape organizational strategies and industry practices (Storbacka et al., 2016).

By integrating these two dimensions, the framework clarifies how the thesis contributes to both theory and practice. The *sustainability context* dimension explains how the interaction of brands with their customers and other stakeholders can enable and foster CSR and circularity. The *level of aggregation* dimension demonstrates how these practices unfold from individual and dyadic interactions at the micro level to multi-stakeholder collaborations at the meso level. Together, these perspectives offer a comprehensive and structured understanding of how brands can foster sustainability through collaboration with their stakeholders.

1.3 Link between research projects

This cumulative dissertation explores how brands can promote sustainability through customer engagement, focusing on CSR and circularity. The four papers together build a coherent narrative by investigating customer engagement on digital engagement platforms within the broader concept of CSR, then shifting the focus to collaborative strategies for circularity involving brands and partners in hybrid settings.

Paper 1 lays the empirical foundation by investigating how gamified online LPs can foster value co-creation, using the case of the adidas's adiClub. Through a qualitative approach combining netnography and semi-structured interviews, it illustrates how gamification encourages customers to participate in brand-related activities, thereby helping firms pursue social, ecological, and economic goals. A new thematic category of practices, termed *community bonding and shaping*, is identified, encompassing the practices of *appreciating* and *collaborating*, which highlight the social dynamics that strengthen engagement between brands and their customers. Accordingly, this paper provides new insights into how gamified LPs

enable and facilitate value co-creation and what underlying purpose organizations pursue in the context of CSR when engaging with members in such a program.

Building on this foundation, Paper 2 shifts from qualitative exploration to quantitative analysis by examining to what extent engagement in OBCs affects customers' sustainable brand perception along its social, economic, and ecological dimensions. Based on adiClub members' interactions in the context of the adidas TERREX brand, this work offers a more granular view of how engagement contributes to sustainable brand perception by distinguishing between five concrete touchpoints: workshops, feedback, challenges, raffles, and exclusives. The study shows that deeper bonding through interactive workshops can positively shape social and ecological brand perceptions, while exclusive product offers mainly enhance economic brand perception. Challenges and member feedback both strengthen the social perception by fostering a sense of togetherness and signaling inclusivity and responsiveness. Notably, the findings reveal that improving ecological brand perception can also indirectly boost economic brand perception, supporting the logic of the triple bottom line. The results also highlight that raffles may foster short-term participation, but do not significantly influence sustainable brand perception. Therefore, by differentiating sustainable brand perception into separate social, ecological, and economic dimensions, the paper challenges the traditional treatment of brand perception as a single construct and emphasizes the complex ways engagement activities in OBCs can support brands' broader CSR objectives.

Moving from broader CSR-related brand strategies to circular economy initiatives, the third paper focuses on how brands can engage their customers to promote circularity. Relying on semi-structured interviews with PUMA employees, customers and business partners, it identifies eight practices across the dimensions of knowledge sharing, resource integration, and customer learning that foster positive climate change engagement related to circularity. These include established practices such as *signaling* transparency and *empowering* customers

through lifecycle collaboration, as well as new practices like *networking*, *facilitating* participation, and *entertaining* through gamification. Hence, this paper enriches the understanding of how circularity initiatives can be more effectively communicated, operationalized, and made attractive to customers.

The fourth paper moves from theoretical and exploratory research to practical application by examining the case studies of PUMA, Patagonia, and H&M. It shows how these brands embed circularity into their business models through concrete strategies, such as take-back programs, design for durability, material innovation, and transparent communication, while emphasizing the crucial role of engaging various stakeholders, including customers, suppliers, and retail partners. Unlike the previous papers, this study focuses on how multi-stakeholder collaboration is already being put into practice to support the transition toward circular business models.

Collectively, the four papers presented in this thesis offer a comprehensive exploration of how brands can foster sustainability by engaging with customers in the context of CSR and circularity. Interactions are initially examined at the micro level by focusing on dyadic relationships between brands and customers on digital engagement platforms within the broader concept of CSR (Papers 1 and 2). The thesis then progresses to a meso-level perspective by exploring circularity through collaborative efforts involving multiple stakeholders in both online and offline environments (Papers 3 and 4).

1.4 Statement of authorship

Except where explicitly referenced in the text of this thesis (cf. authors and journal), no part of this thesis has been previously published or submitted, in whole or in part, for the award of any other degree or diploma. All work presented in this thesis is original, and any contributions from external sources have been properly acknowledged. This thesis has not been submitted to any other tertiary institution for the purpose of obtaining a degree or diploma. All

co-authors have been informed about, and have consented to, the submission and publication of the included articles. The contributions of the author of this thesis - hereafter referred to as “the author” - are described below and summarized in Table 1.4-1.

All papers included in this thesis were developed jointly by the author, Frederic Dreher, as first author, and Tim Ströbel as second author and supervisor. The author was primarily responsible for the conception and design of each research project, the coordination and execution of data collection and analysis, and the preparation of the initial drafts of all manuscripts. Tim Ströbel provided continuous academic supervision throughout the entire research process, offering expert guidance on theoretical frameworks, research design, methodology, and analytical approaches. He regularly engaged in critical discussions, provided detailed feedback on manuscript drafts, and supported the refinement and strengthening of the arguments, structure, and overall scholarly contribution of each paper. Both authors collaborated closely in reviewing and revising manuscripts, ensuring high quality and coherence. The author took full responsibility for the final versions and submissions of all manuscripts.

Frederic Dreher

Frederic Dreher, 28 August 2026

Paper*	Authors	Concept	Administration	Data collection	Data analysis	Writing	Revision	Supervision
1	**Dreher, F.**	x	x	x	x	x	x	
	Ströbel, T.	x				x	x	x
2	**Dreher, F.**	x	x	x	x	x	x	
	Ströbel, T.	x				x	x	x
3	**Dreher, F.**	x	x	x	x	x	x	
	Ströbel, T.					x	x	x
4	**Dreher, F.**	x	x	x	x	x	x	
	Ströbel, T.					x	x	x

***** *Paper numbering is in line with Figure 1.2-1*

Table 1.4-1: Contribution statement

1.5 References

Angelis, R. de. (2018). *Business Models in the Circular Economy: Concepts, Examples and Theory*. Palgrave Pivot.

Bhattacharya, C. B., & Sen, S. (2004). Doing Better at Doing Good: When, Why, and How Consumers Respond to Corporate Social Initiatives. *California Management Review*, *47*(1), 9–24. https://doi.org/10.2307/41166284

Bocken, N., & Ritala, P. (2022). Six ways to build circular business models. *Journal of Business Strategy*, *43*(3), 184–192. https://doi.org/10.1108/jbs-11-2020-0258

Bombaij, N. J., & Dekimpe, M. G. (2020). When do loyalty programs work? The moderating role of design, retailer-strategy, and country characteristics. *International Journal of Research in Marketing*, *37*(1), 175–195. https://doi.org/10.1016/j.ijresmar.2019.07.003

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, *66*(1), 105–114. https://doi.org/10.1016/j.jbusres.2011.07.029

Carlini, J., & Grace, D. (2021). The corporate social responsibility (CSR) internal branding model: Aligning employees' CSR awareness, knowledge, and experience to deliver positive employee performance outcomes. *Journal of Marketing Management*, *37*(7-8), 732–760. https://doi.org/10.1080/0267257X.2020.1860113

Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance. *Academy of Management Review*, *4*(4), 497–505. https://doi.org/10.5465/amr.1979.4498296

Currás-Pérez, R., Dolz-Dolz, C., Miquel-Romero, M. J., & Sánchez-García, I. (2018). How social, environmental, and economic CSR affects consumer-perceived value: Does perceived consumer effectiveness make a difference? *Corporate Social Responsibility and Environmental Management*, *25*(5), 733–747. https://doi.org/10.1002/csr.1490

Du, S., Bhattacharya, C. B., & Sen, S. (2011). Corporate Social Responsibility and Competitive Advantage: Overcoming the Trust Barrier. *Management Science*, *57*(9), 1528–1545. https://doi.org/10.1287/mnsc.1110.1403

Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, *8*(1), 37–51. https://doi.org/10.1002/tqem.3310080106

Frishammar, J., & Parida, V. (2019). Circular Business Model Transformation: A Roadmap for Incumbent Firms. *California Management Review*, *61*(2), 5–29. https://doi.org/10.1177/0008125618811926

Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production*, *143*, 757–768. https://doi.org/10.1016/j.jclepro.2016.12.048

Gong, T. (2018). Customer brand engagement behavior in online brand communities. *Journal of Services Marketing*, *32*(3), 286–299. https://doi.org/10.1108/JSM-08-2016-0293

Gouillart, F. J., & Ramaswamy, V. (2014). *The power of co-creation: Build it with them to boost growth, productivity, and profits*. Free Press.

Hankammer, S., Brenk, S., Fabry, H., Nordemann, A., & Piller, F. T. (2019). Towards circular business models: Identifying consumer needs based on the jobs-to-be-done theory. *Journal of Cleaner Production*, *231*, 341–358. https://doi.org/10.1016/j.jclepro.2019.05.165

Hofacker, C. F., Ruyter, K. de, Lurie, N. H., Manchanda, P., & Donaldson, J. (2016). Gamification and Mobile Marketing Effectiveness. *Journal of Interactive Marketing*, *34*, 25–36. https://doi.org/10.1016/j.intmar.2016.03.001

Hollebeek, L. D., Das, K., & Shukla, Y. (2021). Game on! How gamified loyalty programs boost customer engagement value. *International Journal of Information Management*, *61*, 102308. https://doi.org/10.1016/j.ijinfomgt.2021.102308

Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation and Recycling*, *127*, 221–232. https://doi.org/10.1016/j.resconrec.2017.09.005

Kumar, T. P., Basavaraj, S., & Soundarapandiyan, K. (2024). Can co-creating in CSR initiatives influence loyal customers? Evidence from the banking industry. *Corporate Social Responsibility and Environmental Management*, *31*(1), 180–195. https://doi.org/10.1002/csr.2561

Merli, R., Preziosi, M., & Acampora, A. (2018). How do scholars approach the circular economy? A systematic literature review. *Journal of Cleaner Production*, *178*, 703–722. https://doi.org/10.1016/j.jclepro.2017.12.112

Muniz, A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, *27*(4), 412–432. https://doi.org/10.1086/319618

Nußholz, J. (2017). Circular Business Models: Defining a Concept and Framing an Emerging Research Field. *Sustainability*, *9*(10), 1810. https://doi.org/10.3390/su9101810

Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, *36*(1), 83–96. https://doi.org/10.1007/s11747-007-0070-0

Popoli, P. (2011). Linking CSR strategy and brand image. *Marketing Theory*, *11*(4), 419–433. https://doi.org/10.1177/1470593111418795

Ramaswamy, V., & Ozcan, K. (2016). Brand value co-creation in a digitalized world: An integrative framework and research implications. *International Journal of Research in Marketing*, *33*(1), 93–106. https://doi.org/10.1016/j.ijresmar.2015.07.001

Re, B., Magnani, G., & Zucchella, A. (2021). The Future of Sustainability: Value Co-creation Processes in the Circular Economy. In S. Park, M.-A. Gonzalez-Perez, & D. E. Floriani (Eds.), *The Palgrave handbook of corporate sustainability in the digital era* (1. ed. 2021, pp. 503–527). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-42412-1_25

Steinhoff, L., & Palmatier, R. W. (2016). Understanding loyalty program effectiveness: managing target and bystander effects. *Journal of the Academy of Marketing Science*, *44*(1), 88–107. https://doi.org/10.1007/s11747-014-0405-6

Storbacka, K., Brodie, R. J., Böhmann, T., Maglio, P. P., & Nenonen, S. (2016). Actor engagement as a microfoundation for value co-creation. *Journal of Business Research*, *69*(8), 3008–3017. https://doi.org/10.1016/j.jbusres.2016.02.034

Taillard, M., Peters, L. D., Pels, J., & Mele, C. (2016). The role of shared intentions in the emergence of service ecosystems. *Journal of Business Research*, *69*(8), 2972–2980. https://doi.org/10.1016/j.jbusres.2016.02.030

Tobon, S., Ruiz-Alba, J. L., & García-Madariaga, J. (2020). Gamification and online consumer decisions: Is the game over? *Decision Support Systems*, *128*, 113167. https://doi.org/10.1016/j.dss.2019.113167

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, *68*(1), 1–17. https://doi.org/10.1509/jmkg.68.1.1.24036

Verleye, K., Keyser, A. de, Raassens, N., Alblas, A. A., Lit, F. C., & Huijben, J. C. C. M. (2024). Pushing Forward the Transition to a Circular Economy by Adopting an Actor Engagement Lens. *Journal of Service Research*, *27*(1), 69–88. https://doi.org/10.1177/10946705231175937

Woratschek, H., Horbel, C., & Popp, B. (2020). Determining customer satisfaction and loyalty from a value co-creation perspective. *The Service Industries Journal*, *40*(11-12), 777–799. https://doi.org/10.1080/02642069.2019.1606213

Zheng, X., Cheung, C. M. K., Lee, M. K., & Liang, L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology & People*, *28*(1), 90–106. https://doi.org/10.1108/ITP-08-2013-0144

Chapter 2: Theoretical background

2.1 The evolving role of the customer in value creation: from concept to practice

2.1.1 From value consumption toward value co-creation in marketing

Previously, the central guiding principle of marketing was to bring products to the market and sell them (Vargo & Lusch, 2004). The foundation of value creation was the exchange of operand resources, which are tangible resources to be acted upon (Vargo & Lusch, 2004). Under this so-called goods-dominant logic value creation occurred inside the firm through the utilization of resources to produce goods (Prahalad & Ramaswamy, 2004). Through the exchange of goods and money, value was transferred in a transactional process, whereby consumers as passive recipients consumed or destroyed the value of the product (Vargo & Lusch, 2004). However, this unidirectional view of value creation gradually gave way to a more collaborative understanding.

The emergence of the service-dominant logic (S-D logic) redefined value as something co-created rather than merely produced and delivered, placing greater emphasis on the customer's active role in value creation (Vargo & Lusch, 2004). Central to this shift is the concept of value-in-use, in which value is realized through the application of operant resources such as skills and knowledge (Payne et al., 2008), and co-created through interactions among firms, customers, and other stakeholders (Ramaswamy & Ozcan, 2018; Vargo et al., 2008). Accordingly, firms no longer offer value per se but present value propositions that are actualized in use (Vargo & Lusch, 2004). The roles of producers and customers are no longer distinct as value emerges in joint and reciprocal processes among providers and beneficiaries (Prahalad & Ramaswamy, 2004; Vargo et al., 2008). This transition towards a service-dominant logic underscores the importance of viewing products not as the source of value but as facilitators for service delivery and value co-creation, fundamentally altering how

companies approach their relationships with customers (Grönroos, 2008; Lusch & Vargo, 2006).

Reflecting this shift in logic, value co-creation is understood as an ongoing, dynamic process that unfolds over time through mutual contributions, shared goals, and reciprocal interactions (Prahalad & Ramaswamy, 2004). It is determined by value-in-use, and facilitated and monitored by value-in-exchange (Vargo et al., 2008). Hence, it is through the application and integration of resources made available through exchange that value is co-created (Vargo et al., 2008). This co-creative process inherently depends on continuous interactions that give rise to complex networks of relationships among firms, customers and other relevant stakeholders who collaboratively shape the value creation process (Ramaswamy & Ozcan, 2018). As a result, the focus shifts from firm-centric production to participatory engagement, where the locus of value resides not in the offering itself but in how it is used and experienced (Gouillart & Ramaswamy, 2014). Accordingly, value is both derived through the involvement of and determined by the beneficiary, who is often the customer (Vargo et al., 2008), highlighting the customer's crucial role as determiner and co-creator of value (Tommasetti et al., 2017).

2.1.2 Customer engagement as an enabler and facilitator of value co-creation

With customers taking an active role in the process of value co-creation, researchers and practitioners in marketing have focused on how to build strong relationships between the brand and its customers (Shokri & Alavi, 2019; Sichtmann et al., 2019). A brand, in this context, can be defined as a dynamic collection of meanings co-created in stakeholder interactions, which adds to the perceived value of a product or service (Brodie et al., 2017; Keller, 1993). This broader relational perspective recognizes that specific outcomes are generated by customers' interactive, value co-creative experiences with brands and other stakeholders (Brodie et al.,

2011). Therefore, for branding strategies to be successful, customers must become engaged participants in the creation and consumption of valuable offerings (Obilo et al., 2021).

In marketing research, multiple definitions of customer engagement have been proposed, with the following two being the most widely recognized. Brodie et al. (2011, p. 260) define customer engagement as "a psychological state that occurs by virtue of interactive, co-creative customer experiences with a focal agent/object (e.g., a brand) in focal service relationships". It involves the degree of a customer's brand-related, motivational, and context-dependent state, characterized by specific levels of emotional, cognitive and behavioral activity in direct brand interactions (Hollebeek, 2011). van Doorn et al. (2010, p. 253), by contrast, understand engagement as a process of customer behavior and define engagement as "the customers' behavioral manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers." In the remainder of this research, we have chosen to adopt the former definition as it underlines that co-creation occurs only when the customer engages in voluntary, spontaneous interactions that uniquely customize the customer-to-brand experience. Examples of such non-transactional customer interactions would be word-of-mouth, participation in brand communities or making suggestions to improve the customer experience. As research has shown that customer engagement is crucial in gaining competitive advantage (Alvarez-Milán et al., 2018; Kumar & Pansari, 2016) by positively influencing satisfaction (Brodie et al., 2013), loyalty (Hollebeek, 2011; Shanahan et al., 2019), and brand usage (Harrigan et al., 2018; Hollebeek et al., 2014), brands have taken note of this shift and are currently dedicating efforts towards fostering engagement (Obilo et al., 2021).

2.1.3 Promoting customer engagement through engagement platforms

As brands increasingly aim to engage with customers in value co-creation processes, engagement platforms (EPs) have become an integral part of their business strategy (Brodie et al., 2013; Lemon & Verhoef, 2016). EPs provide an environment that enables and fosters

mutual value exchange between stakeholders (Gouillart & Ramaswamy, 2014), recognizing that no actor alone possesses all the resources for value creation (Vargo & Lusch, 2010; Woratschek et al., 2020). As defined by Breidbach et al. (2014, p. 594), EPs are “physical or virtual touch points designed to provide structural support for the exchange and integration of resources, and thereby co-creation of value between actors in a service ecosystem.” EPs are characterized by transparency, dialogue, reflexivity, and access (Gouillart & Ramaswamy, 2014). First, "transparency" means an actor's interactions on an EP are visible to a broader audience involved in co-creation processes (Breidbach et al., 2014). Second, "accessibility" allows actors to contribute and share content, altering the EP's nature. Third, EPs are designed to facilitate “dialogue” among actors, as resource exchange is essential for value co-creation (Gouillart & Ramaswamy, 2014; Prahalad & Ramaswamy, 2004). Finally, "reflexivity" indicates that an EP can adapt to internal changes (Ramaswamy, 2009). These features facilitate interactions between focal agents (e.g., customers) and objects (e.g., brands), creating a locus of exchange where customer engagement can thrive (Brodie et al., 2011).

While interactions between service providers and customers have previously occurred exclusively via interpersonal, physical interfaces, the advancement, sophistication, and ubiquity of modern information and communication technologies (ICTs) has transformed the nature and scope of brand-to-customer and customer-to-customer interactions (Ramaswamy & Ozcan, 2016). Three game changers of digital transformation (i.e., independence of location, hyperconnectivity, and abundance of information) have paved the way for digital engagement platforms (DEPs) (Breidbach et al., 2018; Gensler et al., 2013; Stegmann et al., 2023). DEPs enable individuals around the world to connect in real-time across multiple channels, increasing both the frequency and persistence of customer-brand touchpoints (Ramaswamy & Ozcan, 2016; Sawhney et al., 2005). Moreover, they enable brands to attract external partners, co-develop offerings, foster user-generated content, and gather in-use feedback, ultimately

enhancing opportunities for value co-creation (Gensler et al., 2013; Kopalle et al., 2020). By providing a dynamic environment for continuous dialogue and interaction, DEPs serve as particularly powerful facilitators of co-creation (Ind et al., 2013; Ramaswamy & Ozcan, 2018).

Among DEPs, online brand communities (OBCs) have emerged as especially relevant platforms for enabling brand-related interactions. Rooted in Muniz and O'Guinn's (2001, p. 412) notion of brand communities as "specialized, non-geographically bound communities, based on a structured set of social relations among admirers of a brand", OBCs represent a digital evolution of the concept. Their virtual nature allows customers to connect with brands and fellow customers more frequently and at lower cost, while engaging in brand-led initiatives and sharing brand experiences (Alonso-Dos-Santos et al., 2018; Wirtz et al., 2013). The sense of belonging fostered in these communities enhances emotional connection and encourages co-creation through content sharing, discussions, and collaborative design (Brodie et al., 2013; McAlexander et al., 2002; Valck et al., 2009).

Brands such as Nike, Starbucks and Apple illustrate the strategic potential of OBCs for value co-creation (Kilambi et al., 2013; Özbölük & Dursun, 2017; Sindhwani & Ahuja, 2014). Nike enables co-design of shoes, Starbucks invites customers to shape future brand experiences, and Apple engages developers in co-creating app ecosystems (Ramaswamy & Ozcan, 2016). These interaction possibilities empower customers and deepen their investment in the brand (Cova & Pace, 2006; Valck et al., 2009). To sustain participation, brands must cultivate an environment of trust, creativity, and progressive involvement (Ramaswamy & Ozcan, 2016). While intrinsic motivations often drive engagement, brands can also implement enabling mechanisms to encourage ongoing contributions (Ind et al., 2013). Hennig-Thurau et al. (2004) identified eight such motivators, including emotional expression, social benefits, advice-seeking, and brand support, with social benefits having the strongest impact (Brodie et al., 2013).

Despite their benefits, a central challenge of OBCs lies in maintaining active participation (Füller et al., 2008; Zheng et al., 2015). One way to overcome this challenge is through gamification, which is the application of game-like elements in non-game contexts (Eisingerich et al., 2019; Xi & Hamari, 2020). Gamification seeks to enhance user motivation and engagement by integrating components such as points, badges, leaderboards, stories, and challenges (Hamari et al., 2014; Hofacker et al., 2016). Originally rooted in game design, gamification has since expanded across sectors including business, education, and health (Deterding, 2019), and has gained traction in services and transformative marketing (Hamari & Koivisto, 2015; Harwood & Garry, 2015; Mitchell et al., 2017). As the core premise of gamification is its ability to engage users by appealing to both their extrinsic and intrinsic motivations, it leads to a more interactive and engaging experience (Hamari et al., 2014).

In contrast to traditional loyalty programs that reward spending (Sharp & Sharp, 1997; Steinhoff & Palmatier, 2016), gamification emphasizes user interaction and intrinsic motivation through playful, purpose-driven activities (Blohm & Leimeister, 2013; Huotari & Hamari, 2012). For instance, Starbucks engages customers via gamified reward programs like purchase-based bingo games, while McDonald's applies familiar Monopoly mechanics to foster recurring engagement (Hwang & Choi, 2020). Likewise, brands like adidas and Nike se gamified running apps where users compete on leaderboards and cheer one another through social buttons (Nobre & Ferreira, 2017). These examples show how gamification deepens the user experience by blending entertainment, competition, and community interaction. To get the most out of their investment, brands need to consider four distinct aspect of gamification, which are (1) progress paths that relate to rules and the level of complexity, (2) feedback and rewards such as obtained points and status, (3) social connections that enhance group dynamics, and (4) user experiences driven by entertainment, challenges, escapism and integration (Hammedi et al., 2017; Hwang & Choi, 2020). Importantly, gamification does not simply promote

interaction, but it enables customers to actively co-create experiences and value (García-Magro & Soriano-Pinar, 2019; Lopes et al., 2024; Nobre & Ferreira, 2017). In this context, gamification functions as an experiential value co-creation process, transforming platforms like OBCs into game service systems (Huotari & Hamari, 2012; Leclercq et al., 2018).

Despite the transformative potential of DEPs, they should not be viewed as substitutes for physical, offline engagement environments. Rather, an integrated approach that combines both online and offline touchpoints in hybrid environments is essential for fostering holistic value co-creation experiences (Breidbach et al., 2014; Burke, 2002). Offline engagement platforms, such as brand stores, events, workshops, or product experience spaces, play a vital role in enabling sensory-rich, emotionally resonant, and socially embedded interactions that are often difficult to replicate digitally (Blut et al., 2023). These physical touchpoints facilitate embodied and experiential learning, trust-building, and serendipitous encounters, which are critical for developing deep customer-brand relationships (Barari et al., 2021; Bolton et al., 2022; Grohs et al., 2020; Palmatier et al., 2006). Therefore, successful engagement strategies require brands to orchestrate consistent and complementary interactions across both digital and physical domains, leveraging the unique strengths of each context to maximize customer engagement and long-term value creation (Gyrd-Jones & Kornum, 2013; Verhoef et al., 2015).

2.1.4 Customer engagement practices

To examine brands' efforts related to engaging their customers in value co-creation processes, social practice theory (SPT) provides a robust framework. SPT posits that customer behaviors are not exclusively driven by external stimuli or individual choices but are embedded in and shaped by social practices and interactions within specific contexts (Reckwitz, 2002; Shove et al., 2012). SPT turns away from moments of individual decision-making and towards engaging in inconspicuous consumption and social practices (Hargreaves, 2011; Shove et al., 2012). Practices are by their very nature social and thus shared rather than individual (Blue et al.,

2016). According to Schau et al. (2009, p. 31), practices are "linked and implicit ways of understanding, saying, and doing things" and "comprise a temporally unfolding and spatially dispersed nexus of behaviors that include practical activities, performances, and representations or talk." In other words, practices are the recurring actions of actors in interactional and dynamic branding processes that foster engagement through resource integration. Therefore, as SPT draws on the view that social reality consists of nexuses of practices (Reckwitz, 2002; Schatzki, 1996), integrating customer engagement with SPT offers a nuanced understanding of how engagement behaviors are sustained and transformed within cultural and social contexts. Practices consist of materials (e.g., digital platforms), competences (e.g., content creation skills), and meaning (e.g., community identity, brand loyalty), which converge to shape customer engagement behaviors (Shove et al., 2012). By participating in these practices, customers enact and perpetuate the social norms and values inherent in the brand culture, thereby ensuring sustained engagement over time (Hollebeek et al., 2014; Reckwitz, 2002).

One of the most acknowledged studies examining how customers engage with the brand and among each other in recurring practices has been published by Schau et al. (2009). The authors illustrate how brand communities serve as an environment for social practices where customers collectively engage with brands and each other through traditions, rituals and shared narratives. They introduced 12 practices along four thematic categories of SPT: social networking, impression management, community engagement, and brand use. First, the thematic category of *social networking* is about enabling, strengthening, and sustaining ties among members of the brand community. It entails the practices of *welcoming*, *empathizing,* and *governing.* (1) *Welcoming* implies greeting new members and embracing them into the community. (2) *Empathizing* refers to supporting other members emotionally and physically in brand-related and non-brand-related matters. (3) *Governing* means expressing the behavioral

expectations within the brand community. The second thematic category, *impression management*, is externally focused and meant to create a positive image of the brand and its community. It comprises two practices: (1) *Evangelizing* means inspiring others to use the brand by sharing good news, exciting experiences, and interesting facts. (2) *Justifying* refers to members explaining why they spend time on brand community-related activities. *Community engagement*, the third category, focuses on reinforcing member engagement and consists of four practices: (1) *Staking* is defined as acknowledging variance within the brand community. (2) *Milestoning* refers to starting and finishing a specific event. (3) *Badging* means translating milestones into symbols. (4) *Documenting* encompasses outlining the brand relationship journey narratively. The fourth and last thematic category is called *brand use*, which deals with enhancing or improving the use of the focal brand. It comprises three practices: (1) *Grooming* entails caring for the brand and establishing optimal use patterns. (2) *Customizing* means tailoring the brand to the specific needs of certain subgroups or individuals. (3) *Commoditizing* refers to members giving advice and recommendations to other members or the firm on what to do or change.

Above practices are well established in marketing literature and have already been applied in various research contexts (Busca & Bertrandias, 2020; Grohs et al., 2020; He et al., 2017). Furthermore, vast literature exists in service and brand research that builds on and extends the theoretical foundation of Schau et al. (2009) (see table 2.1-1). For example, research was conducted on collaborative practices between firms and brand communities to derive strategies for successful value co-creation (Lombardo & Cabiddu, 2017; Skålén et al., 2015). Additionally, Schau et al.'s (2009) community engagement practices were complemented to account for the more dynamic nature of online brand communities (Ardley et al., 2020; Eigenraam et al., 2018; Hollebeek et al., 2017). On a more granular level, Habibi et al. (2014) examined practices in brand communities based in social media owing to latter's relevance for

contemporary marketing. Finally, research built on the practices of Schau et al. (2009) to understand the relevance of brand legitimacy (Hakala et al., 2017), measure the effect of co-creation practices on brand loyalty (Luo et al., 2015), and drive adoption of circular business models (CBMs) (Verleye et al., 2024). Considering the various research contexts, in which social practices were used and refined, SPT allows researchers and practitioners to gain deeper insights into the socio-cultural underpinnings of customer engagement.

Table 2.1-1: Overview of main contributions to practice theory

Source	Focus and contribution	Practices	Brand Community	Customer Engagement	Sustainability
Schau et al., 2009	Collective value creation in brand communities	Social networking: welcoming, empathizing, governing Impression management: evangelizing, justifying Community engagement: staking, milestoning, badging, documenting Brand use: grooming, customizing, commoditizing	P	P	-
Kumar et al., 2010	Classifying customer's engagement value with a firm	WOM, new product ideas, posting a positive brand message on a blog, referring, providing feedback to a firm, information sharing, assistance from other customers, co-creation	P	P	-
Hargreaves, 2011	Practices of pro-environmental behavior	Challenging and re-materializing, dis-assembling and reconfiguring	-	-	P
Brodie et al., 2013	Explore the nature and scope of consumer engagement in an online brand community environment.	Interaction among consumers, help solve each other's service problems, negative and positive eWOM, consumer-to-consumer recommendations, discussions about brand-related topics, providing social support, criticizing the brand, giving misleading brand-related advice, C2C/C2B/C2C interactions	P	P	-
Habibi et al., 2014	Unique brand community characteristics in social media and associated practices	Social networking Impression management Community engagement Brand use	P	P	-
Uhrich, 2014	Customer-to-customer practices on joint and customer-led physical and virtual platforms in team sports	Associating and dissociating, engaging and sharing, competing, intensifying, exchanging	-	-	-
Luo et al., 2015	Measuring the effect of value co-creation practices on community commitment and brand loyalty	Social networking Impression management Community engagement Brand use	P	P	-
Skålén et al. 2015	Value co-creation practices between firms and brand communities	Interacting practices: questioning and answering, dialoguing, translating Identity practices: praising, branding, mirroring Organizing practices: managing, governing	P	P	-

Hollebeek et al. 2017	Understanding the nature and dynamics of consumers' engagement practices in online brand communities	Greeting, regulating, assisting, celebrating, appreciating, empathizing, mingling, ranking	P	P	-
Hakala et al., 2017	Legitimacy as a critical practice in online brand communities	Legitimization	P	P	-
Lombardo & Cabiddu, 2017	Value co-creation in terms of service provider–customer interaction practices	Access to capital, capital exploitation, capital attrition	-	-	-
Stieler & Germelmann, 2018	Triadic constellations in actor engagement practices in team sport ecosystems	Implementing, informing & discussing, performing, signaling Simultaneous, sequential, actor-led	-	-	-
Eigenraam et al., 2018	A Consumer-based Taxonomy of Digital Customer Engagement Practices	For fun practices, learning practices, customer feedback, work for a brand, talk about a brand	P	P	-
Zanini et al., 2019	Engagement practices on a Twitter soccer brand community	First type: tweeting, retweeting, liking, mentioning and replying Second type: greeting, empathizing, assisting, mingling, appreciating, celebrating, complaining, ranking	P	P	-
Ardley et al., 2020	Co-creation practices in online brand communities revolving around engagement procedures and understandings	Engagements, procedures, understanding	P	P	-
Pasca et al., 2021	Synthesize and conceptualize the current state of gamification practices in tourism and hospitality research	Edutainment, sustainable behavior, engagement factors, service provider-generated content, user generated reviews	-	-	-
Verleye et al., 2024	Inform and guide the development and adoption of CMBs	Signaling, convincing, matching, legitimizing, supporting, empowering	-	P	P
Dreher & Ströbel, 2023	The role of gamified online platforms for value co-creation	Social networking: welcoming, empathizing, governing Impression management: evangelizing, justifying Community engagement: staking, milestoning, badging, documenting Brand use: grooming, customizing, commoditizing Community bonding & shaping: appreciating, collaborating	P	P	P

2.1.5 References

Alonso-Dos-Santos, M., Rejón Guardia, F., Pérez Campos, C., Calabuig-Moreno, F., & Ko, Y. J. (2018). Engagement in sports virtual brand communities. *Journal of Business Research*, *89*, 273–279. https://doi.org/10.1016/j.jbusres.2017.12.053

Alvarez-Milán, A., Felix, R., Rauschnabel, P. A., & Hinsch, C. (2018). Strategic customer engagement marketing: A decision making framework. *Journal of Business Research*, *92*, 61–70. https://doi.org/10.1016/j.jbusres.2018.07.017

Ardley, B., McIntosh, E., & McManus, J. (2020). From transactions to interactions: The value of co-creation processes within online brand consumer communities. *Business Process Management Journal*, *26*(4), 825–838. https://doi.org/10.1108/bpmj-10-2019-0444

Barari, M., Ross, M., Thaichon, S., & Surachartkumtonkun, J. (2021). A meta-analysis of customer engagement behaviour. *International Journal of Consumer Studies*, *45*(4), 457–477. https://doi.org/10.1111/ijcs.12609

Blohm, I., & Leimeister, J. M. (2013). Gamification. *Business & Information Systems Engineering*, *5*(4), 275–278. https://doi.org/10.1007/s12599-013-0273-5

Blue, S., Shove, E., Carmona, C., & Kelly, M. P. (2016). Theories of practice and public health: understanding (un)healthy practices. *Critical Public Health*, *26*(1), 36–50. https://doi.org/10.1080/09581596.2014.980396

Blut, M., Kulikovskaja, V., Hubert, M., Brock, C., & Grewal, D. (2023). Effectiveness of engagement initiatives across engagement platforms: A meta-analysis. *Journal of the Academy of Marketing Science*, *51*(5), 941–965. https://doi.org/10.1007/s11747-023-00925-7

Bolton, R. N., Gustafsson, A., Tarasi, C. O., & Witell, L. (2022). Designing satisfying service encounters: website versus store touchpoints. *Journal of the Academy of Marketing Science*, *50*(1), 85–107. https://doi.org/10.1007/s11747-021-00808-9

Breidbach, C. F., Brodie, R., & Hollebeek, L. (2014). Beyond virtuality: From engagement platforms to engagement ecosystems. *Managing Service Quality*, *24*(6), 592–611. https://doi.org/10.1108/msq-08-2013-0158

Breidbach, C. F., Choi, S., Ellway, B., Keating, B. W., Kormusheva, K., Kowalkowski, C., Lim, C., & Maglio, P. (2018). Operating without operations: how is technology changing the role of the firm? *Journal of Service Management*, *29*(5), 809–833. https://doi.org/10.1108/JOSM-05-2018-0127

Brodie, R. J., Benson-Rea, M., & Medlin, C. J. (2017). Branding as a dynamic capability. *Marketing Theory*, *17*(2), 183–199. https://doi.org/10.1177/1470593116679871

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer Engagement. *Journal of Service Research*, *14*(3), 252–271. https://doi.org/10.1177/1094670511411703

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, *66*(1), 105–114. https://doi.org/10.1016/j.jbusres.2011.07.029

Burke, R. R. (2002). Technology and the Customer Interface: What Consumers Want in the Physical and Virtual Store. *Journal of the Academy of Marketing Science*, *30*(4), 411–432.

Busca, L., & Bertrandias, L. (2020). A Framework for Digital Marketing Research: Investigating the Four Cultural Eras of Digital Marketing. *Journal of Interactive Marketing*, *49*(1), 1–19. https://doi.org/10.1016/j.intmar.2019.08.002

Cova, B., & Pace, S. (2006). Brand community of convenience products: New forms of customer empowerment – the case "my Nutella The Community". *European Journal of Marketing*, *40*(9/10), 1087–1105. https://doi.org/10.1108/03090560610681023

Deterding, S. (2019). Gamification in Management: Between Choice Architecture and Humanistic Design. *Journal of Management Inquiry*, *28*(2), 131–136. https://doi.org/10.1177/1056492618790912

Eigenraam, A. W., Eelen, J., van Lin, A., & Verlegh, P. W. (2018). A Consumer-based Taxonomy of Digital Customer Engagement Practices. *Journal of Interactive Marketing*, *44*, 102–121. https://doi.org/10.1016/j.intmar.2018.07.002

Eisingerich, A. B., Marchand, A., Fritze, M. P., & Dong, L. (2019). Hook vs. hope: How to enhance customer engagement through gamification. *International Journal of Research in Marketing*, *36*(2), 200–215. https://doi.org/10.1016/j.ijresmar.2019.02.003

Füller, J., Matzler, K., & Hoppe, M. (2008). Brand Community Members as a Source of Innovation. *Journal of Product Innovation Management*, *25*(6), 608–619. https://doi.org/10.1111/j.1540-5885.2008.00325.x

García-Magro, C., & Soriano-Pinar, I. (2019). Design of services in servitized firms: gamification as an adequate tool. *Journal of Business & Industrial Marketing*, *35*(3), 575–585. https://doi.org/10.1108/JBIM-12-2018-0413

Gensler, S., Völckner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing Brands in the Social Media Environment. *Journal of Interactive Marketing*, *27*(4), 242–256. https://doi.org/10.1016/j.intmar.2013.09.004

Gouillart, F. J., & Ramaswamy, V. (2014). *The power of co-creation: Build it with them to boost growth, productivity, and profits*. Free Press.

Grohs, R., Wieser, V. E., & Pristach, M. (2020). Value cocreation at sport events. *European Sport Management Quarterly*, *20*(1), 69–87. https://doi.org/10.1080/16184742.2019.1702708

Grönroos, C. (2008). Service logic revisited: Who creates value? And who co-creates? *European Business Review*, *20*(4), 298–314. https://doi.org/10.1108/09555340810886585

Gyrd-Jones, R. I., & Kornum, N. (2013). Managing the co-created brand: Value and cultural complementarity in online and offline multi-stakeholder ecosystems. *Journal of Business Research*, *66*(9), 1484–1493. https://doi.org/10.1016/j.jbusres.2012.02.045

Habibi, M. R., Laroche, M., & Richard, M.-O. (2014). Brand communities based in social media: How unique are they? Evidence from two exemplary brand communities.

International Journal of Information Management, *34*(2), 123–132. https://doi.org/10.1016/j.ijinfomgt.2013.11.010

Hakala, H., Niemi, L., & Kohtamäki, M. (2017). Online brand community practices and the construction of brand legitimacy. *Marketing Theory*, *17*(4), 537–558. https://doi.org/10.1177/1470593117705695

Hamari, J., & Koivisto, J. (2015). Why do people use gamification services? *International Journal of Information Management*, *35*(4), 419–431. https://doi.org/10.1016/j.ijinfomgt.2015.04.006

Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does Gamification Work? -- A Literature Review of Empirical Studies on Gamification. In *2014 47th Hawaii International Conference on System Sciences* (pp. 3025–3034). IEEE. https://doi.org/10.1109/HICSS.2014.377

Hammedi, W., Leclerq, T., & van Riel, A. C. (2017). The use of gamification mechanics to increase employee and user engagement in participative healthcare services. *Journal of Service Management*, *28*(4), 640–661. https://doi.org/10.1108/JOSM-04-2016-0116

Hargreaves, T. (2011). Practice-ing behaviour change: Applying social practice theory to pro-environmental behaviour change. *Journal of Consumer Culture*, *11*(1), 79–99. https://doi.org/10.1177/1469540510390500

Harrigan, P., Evers, U., Miles, M. P., & Daly, T. (2018). Customer engagement and the relationship between involvement, engagement, self-brand connection and brand usage intent. *Journal of Business Research*, *88*, 388–396. https://doi.org/10.1016/j.jbusres.2017.11.046

Harwood, T., & Garry, T. (2015). An investigation into gamification as a customer engagement experience environment. *Journal of Services Marketing*, *29*(6/7), 533–546. https://doi.org/10.1108/JSM-01-2015-0045

He, Y., Chen, Q., Lee, R. P., Wang, Y., & Pohlmann, A. (2017). Consumers' Role Performance and Brand Identification: Evidence from a Survey and a Longitudinal Field Experiment. *Journal of Interactive Marketing*, *38*, 1–11. https://doi.org/10.1016/j.intmar.2016.11.001

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, *18*(1), 38–52. https://doi.org/10.1002/dir.10073

Hofacker, C. F., Ruyter, K. de, Lurie, N. H., Manchanda, P., & Donaldson, J. (2016). Gamification and Mobile Marketing Effectiveness. *Journal of Interactive Marketing*, *34*, 25–36. https://doi.org/10.1016/j.intmar.2016.03.001

Hollebeek, L. D. (2011). Demystifying customer brand engagement: Exploring the loyalty nexus. *Journal of Marketing Management*, *27*(7-8), 785–807. https://doi.org/10.1080/0267257X.2010.500132

Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*, *28*(2), 149–165. https://doi.org/10.1016/j.intmar.2013.12.002

Hollebeek, L. D., Juric, B., & Tang, W. (2017). Virtual brand community engagement practices: A refined typology and model. *Journal of Services Marketing*, *31*(3), 204–217. https://doi.org/10.1108/jsm-01-2016-0006

Huotari, K., & Hamari, J. (2012). Defining gamification. In A. Lugmayr (Ed.), *Proceeding of the 16th International Academic MindTrek Conference* (pp. 17–22). ACM. https://doi.org/10.1145/2393132.2393137

Hwang, J., & Choi, L. (2020). Having fun while receiving rewards? Exploration of gamification in loyalty programs for consumer loyalty. *Journal of Business Research*, *106*, 365–376. https://doi.org/10.1016/j.jbusres.2019.01.031

Ind, N., Iglesias, O., & Schultz, M. (2013). Building Brands Together: Emergence and Outcomes of Co-Creation. *California Management Review*, *55*(3), 5–26. https://doi.org/10.1525/cmr.2013.55.3.5

Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, *57*(1), 1–22. https://doi.org/10.1177/002224299305700101

Kilambi, A., Laroche, M., & Richard, M.-O. (2013). Constitutive marketing. *International Journal of Advertising*, *32*(1), 45–64. https://doi.org/10.2501/IJA-32-1-045-064

Kopalle, P. K., Kumar, V., & Subramaniam, M. (2020). How legacy firms can embrace the digital ecosystem via digital customer orientation. *Journal of the Academy of Marketing Science*, *48*(1), 114–131. https://doi.org/10.1007/s11747-019-00694-2

Kumar, V., & Pansari, A. (2016). Competitive Advantage through Engagement. *Journal of Marketing Research*, *53*(4), 497–514. https://doi.org/10.1509/jmr.15.0044

Leclercq, T., Hammedi, W., & Poncin, I. (2018). The Boundaries of Gamification for Engaging Customers: Effects of Losing a Contest in Online Co-creation Communities. *Journal of Interactive Marketing*, *44*, 82–101. https://doi.org/10.1016/j.intmar.2018.04.004

Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, *80*(6), 69–96. https://doi.org/10.1509/jm.15.0420

Lombardo, S., & Cabiddu, F. (2017). What's in it for me? Capital, value and co-creation practices. *Industrial Marketing Management*, *61*, 155–169. https://doi.org/10.1016/j.indmarman.2016.06.005

Lopes, J. M., Gomes, S., & Rodrigues, I. (2024). Playing the gamification and co-creation game: A bibliometric literature review. *Management Review Quarterly*, *74*(1), 353–376. https://doi.org/10.1007/s11301-022-00302-8

Luo, N., Zhang, M., & Liu, W. (2015). The effects of value co-creation practices on building harmonious brand community and achieving brand loyalty on social media in China. *Computers in Human Behavior*, *48*, 492–499. https://doi.org/10.1016/j.chb.2015.02.020

Lusch, R. F., & Vargo, S. L. (2006). Service-dominant logic: Reactions, reflections and refinements. *Marketing Theory*, *6*(3), 281–288. https://doi.org/10.1177/1470593106066781

McAlexander, J. H., Schouten, J. W., & Koenig, H. F. (2002). Building Brand Community. *Journal of Marketing*, *66*(1), 38–54. https://doi.org/10.1509/jmkg.66.1.38.18451

Mitchell, R., Schuster, L., & Drennan, J. (2017). Understanding how Gamification Influences Behaviour in Social Marketing. *Australasian Marketing Journal*, *25*(1), 12–19. https://doi.org/10.1016/j.ausmj.2016.12.001

Muniz, A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, *27*(4), 412–432. https://doi.org/10.1086/319618

Nobre, H., & Ferreira, A. (2017). Gamification as a platform for brand co-creation experiences. *Journal of Brand Management*, *24*(4), 349–361. https://doi.org/10.1057/s41262-017-0055-3

Obilo, O. O., Chefor, E., & Saleh, A. (2021). Revisiting the consumer brand engagement concept. *Journal of Business Research*, *126*, 634–643. https://doi.org/10.1016/j.jbusres.2019.12.023

Özbölük, T., & Dursun, Y. (2017). Online brand communities as heterogeneous gatherings: A netnographic exploration of Apple users. *Journal of Product & Brand Management*, *26*(4), 375–385. https://doi.org/10.1108/JPBM-10-2015-1018

Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis. *Journal of Marketing*, *70*(4), 136–153. https://doi.org/10.1509/jmkg.70.4.136

Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, *36*(1), 83–96. https://doi.org/10.1007/s11747-007-0070-0

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, *18*(3), 5–14. https://doi.org/10.1002/dir.20015

Ramaswamy, V. (2009). Leading the transformation to co-creation of value. *Strategy & Leadership*, *37*(2), 32–37. https://doi.org/10.1108/10878570910941208

Ramaswamy, V., & Ozcan, K. (2016). Brand value co-creation in a digitalized world: An integrative framework and research implications. *International Journal of Research in Marketing*, *33*(1), 93–106. https://doi.org/10.1016/j.ijresmar.2015.07.001

Ramaswamy, V., & Ozcan, K. (2018). What is co-creation? An interactional creation framework and its implications for value creation. *Journal of Business Research*, *84*, 196–205. https://doi.org/10.1016/j.jbusres.2017.11.027

Reckwitz, A. (2002). Toward a Theory of Social Practices. *European Journal of Social Theory*, *5*(2), 243–263. https://doi.org/10.1177/13684310222225432

Sawhney, M., Verona, G., & Prandelli, E. (2005). Collaborating to create: The Internet as a platform for customer engagement in product innovation. *Journal of Interactive Marketing*, *19*(4), 4–17. https://doi.org/10.1002/dir.20046

Schatzki, T. R. (1996). *Social Practices: A Wittgensteinian Approach to Human Activity and the Social*. Cambridge University Press.

Schau, H. J., Muñiz, A. M., & Arnould, E. J. (2009). How Brand Community Practices Create Value. *Journal of Marketing*, *73*(5), 30–51. https://doi.org/10.1509/jmkg.73.5.30

Shanahan, T., Tran, T. P., & Taylor, E. C. (2019). Getting to know you: Social media personalization as a means of enhancing brand loyalty and perceived quality. *Journal of Retailing and Consumer Services*, *47*, 57–65. https://doi.org/10.1016/j.jretconser.2018.10.007

Sharp, B., & Sharp, A. (1997). Loyalty programs and their impact on repeat-purchase loyalty patterns. *International Journal of Research in Marketing*, *14*(5), 473–486. https://doi.org/10.1016/S0167-8116(97)00022-0

Shokri, M., & Alavi, A. (2019). The Relationship Between Consumer-Brand Identification and Brand Extension. *Journal of Relationship Marketing*, *18*(2), 124–145. https://doi.org/10.1080/15332667.2018.1534064

Shove, E., Pantzar, M., & Watson, M. (2012). *The dynamics of social practice: Everyday life and how it changes*. SAGE Publ. https://doi.org/10.4135/9781446250655

Sichtmann, C., Davvetas, V., & Diamantopoulos, A. (2019). The relational value of perceived brand globalness and localness. *Journal of Business Research*, *104*, 597–613. https://doi.org/10.1016/j.jbusres.2018.10.025

Sindhwani, P., & Ahuja, V. (2014). A Study of Online Co-Creation Strategies of Starbucks Using Netnography. *International Journal of Online Marketing*, *4*(1), 39–51. https://doi.org/10.4018/ijom.2014010104

Skålén, P., Pace, S., & Cova, B. (2015). Firm-brand community value co-creation as alignment of practices. *European Journal of Marketing*, *49*(3/4), 596–620. https://doi.org/10.1108/ejm-08-2013-0409

Stegmann, P., Nagel, S., & Ströbel, T. (2023). The digital transformation of value co-creation: A scoping review towards an agenda for sport marketing research. *European Sport Management Quarterly*, *23*(4), 1221–1248. https://doi.org/10.1080/16184742.2021.1976241

Steinhoff, L., & Palmatier, R. W. (2016). Understanding loyalty program effectiveness: managing target and bystander effects. *Journal of the Academy of Marketing Science*, *44*(1), 88–107. https://doi.org/10.1007/s11747-014-0405-6

Tommasetti, A., Troisi, O., & Vesci, M. (2017). Measuring customer value co-creation behavior. *Journal of Service Theory and Practice*, *27*(5), 930–950. https://doi.org/10.1108/JSTP-10-2015-0215

Valck, K. de, van Bruggen, G. H., & Wierenga, B. (2009). Virtual communities: A marketing perspective. *Decision Support Systems*, *47*(3), 185–203. https://doi.org/10.1016/j.dss.2009.02.008

van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. *Journal of Service Research*, *13*(3), 253–266. https://doi.org/10.1177/1094670510375599

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, *68*(1), 1–17. https://doi.org/10.1509/jmkg.68.1.1.24036

Vargo, S. L., & Lusch, R. F. (2010). From Repeat Patronage to Value Co-creation in Service Ecosystems: A Transcending Conceptualization of Relationship. *Journal of Business Market Management*, *4*(4), 169–179. https://doi.org/10.1007/s12087-010-0046-0

Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, *26*(3), 145–152. https://doi.org/10.1016/j.emj.2008.04.003

Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From Multi-Channel Retailing to Omni-Channel Retailing. *Journal of Retailing*, *91*(2), 174–181. https://doi.org/10.1016/j.jretai.2015.02.005

Verleye, K., Keyser, A. de, Raassens, N., Alblas, A. A., Lit, F. C., & Huijben, J. C. C. M. (2024). Pushing Forward the Transition to a Circular Economy by Adopting an Actor Engagement Lens. *Journal of Service Research*, *27*(1), 69–88. https://doi.org/10.1177/10946705231175937

Wirtz, J., Ambtman, A. den, Bloemer, J., Horváth, C., Ramaseshan, B., van de Klundert, J., Gurhan Canli, Z., & Kandampully, J. (2013). Managing brands and customer engagement in online brand communities. *Journal of Service Management*, *24*(3), 223–244. https://doi.org/10.1108/09564231311326978

Woratschek, H., Horbel, C., & Popp, B. (2020). Determining customer satisfaction and loyalty from a value co-creation perspective. *The Service Industries Journal*, *40*(11-12), 777–799. https://doi.org/10.1080/02642069.2019.1606213

Xi, N., & Hamari, J. (2020). Does gamification affect brand engagement and equity? A study in online brand communities. *Journal of Business Research*, *109*, 449–460. https://doi.org/10.1016/j.jbusres.2019.11.058

Zheng, X., Cheung, C. M. K., Lee, M. K., & Liang, L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology & People*, *28*(1), 90–106. https://doi.org/10.1108/ITP-08-2013-0144

2.2 Customer engagement in the context of sustainability

2.2.1 Customer engagement and corporate social responsibility

Over the past decades, corporate social responsibility (CSR) has increasingly become a topic of high academic and management interest (Maon et al., 2010; Peloza & Shang, 2011). Individuals have extended their expectations of a firm from looking at simple business results to assessing how these results can be achieved in a sustainable way (Maon et al., 2010; Peloza & Shang, 2011; Popoli, 2011). This is why many firms have been seriously committed in integrating CSR into every aspect of their businesses (Aguinis & Glavas, 2019; Dey et al., 2018). One of the first and most widely recognized definitions of CSR was introduced by Carroll (1979) who states that social responsibility must include the entire range of obligations a business has to society along the legal, ethical, economic and discretionary categories of business performance. Building on this definition, the concept of triple bottom line (TBL) emerged, which expands a company's focus beyond the traditional bottom line of profit to include social (i.e., people) and environmental (i.e., planet) responsibilities (Elkington, 1998). This holistic approach to sustainable business practices reflects customers' highest expectations concerning economic growth, environmental protection and social cohesion and therefore allows to develop CSR strategies and actions that are more tangible and easy to assess for customers (Eberhard-Harribey, 2006; Öberseder et al., 2014). Thus, a well-established definition of CSR is "a firm's commitment to maximize long-term economic, societal and environmental well-being through business practices, policies and resources" (Du et al., 2011, p. 1528). It means that firms approach CSR as a way to achieve their strategic objectives while simultaneously bettering the world through initiatives that seek to improve the environment, safety, public health or community well-being (Du et al., 2011).

The economic dimension of CSR can be described as society's expectations that the firm will be profitable in the long term, use and reinvest its profit well, generate stable employment,

and obtain utilities by producing and selling quality goods and services (Alvarado-Herrera et al., 2017). The social dimension refers to a firm's mission to create benefits and well-being for its stakeholders and society, which requires finding a balance between personal and societal needs when aiding social causes (Choi & Ng, 2011; Joyce & Paquin, 2016). Finally, the environmental dimension speaks about a firm's environmentally friendly behavior, including how to make optimum use of natural resources, minimize ecological externalities in production processes, improve waste management, and promote eco-friendly products (Choi & Ng, 2011; Currás-Pérez et al., 2018).

These three dimensions together form the foundation for how customers perceive a brand's overall commitment to sustainability. Sustainable brand perception, therefore, refers to the personal meaning stored in the customer's memory regarding a brand's behavior across the economic, social, and ecological dimensions (Du et al., 2011; Keller, 2003). It reflects how customers evaluate a brand's long-term value creation, ethical commitment, and environmental responsibility. As such, sustainable brand perception is closely shaped by CSR-related signals, which customers tend to consider in their purchase decisions (Gong et al., 2021; Huang et al., 2014). Accordingly, research has focused on the effects of brand perception related to CSR on customer behavior variables (Alvarez-Milán et al., 2018). It has been shown to have a positive impact on firm credibility (Lafferty, 2007), brand reputation (Brammer & Millington, 2005; Fatma et al., 2015), customer-company identification (Kang & Hustvedt, 2014; Marin & Ruiz, 2007; Sen & Bhattacharya, 2001), attitude towards the firm (Du et al., 2011; Tian et al., 2011), and customer satisfaction and loyalty (Luo & Bhattacharya, 2006; Pérez & Del Rodríguez Bosque, 2015). Therefore, CSR is well established as a key to sustainable development and an imperative for achieving differentiation (Carlini & Grace, 2021).

As customer-brand and customer-customer interactions shape the way a brand is perceived (Brodie et al., 2011), brands that aspire to be recognized for embodying CSR values must foster

deeper engagement and shared responsibility for social and environmental outcomes with their customers (Sang & Han, 2023). This way, joint positive outcomes of interaction strengthen the sustainability of the brand (Mubushar et al., 2021). For example, customers engaging with a brand's recycling initiatives, climate-neutral packaging, or water conservation efforts contribute to a richer and more favorable sustainable brand perception (Sheth, 2020). Social interactions in OBCs, customer feedback channels, or participatory campaigns reinforce this process (Currás-Pérez et al., 2018; Zheng et al., 2015). In turn, these co-created perceptions influence brand attractiveness, trust, and ultimately, purchase behavior (Gupta et al., 2013; Osei-Frimpong & McLean, 2018).

Importantly, brands may choose different engagement strategies depending on the specific CSR purpose they aim to promote (Bhattacharya & Sen, 2004; Du et al., 2011). Whether the goal is to raise awareness about a social cause, drive participation in sustainable practices, or communicate ecological product innovation, the form and intensity of customer engagement should be aligned with the underlying intent (Fatma et al., 2015). For example, engaging environmentally conscious customers in brand-led sustainability projects supports deeper attachment and strengthens the brand's sustainability image (Hajli et al., 2017; Martinez-Conesa et al., 2017; Peloza & Shang, 2011). Similarly, brands aiming to promote social equity may involve customers in community volunteering or education programs (Lee et al., 2021; Marin et al., 2009; Vlachos et al., 2009), while economic CSR initiatives might focus on promoting local entrepreneurship or supporting fair-trade value chains (Nicholls, 2010; Porter & Kramer, 2018). This alignment between purpose and engagement form is crucial, as customers are more likely to engage with brands that demonstrate genuine commitment to sustainability (Chernev & Blair, 2015). Therefore, brands must make targeted efforts to communicate their CSR strategies clearly and consistently (Iglesias et al., 2020).

2.2.2 Customer engagement in the circular economy

In recent years, the interconnected environmental crises of pollution, loss of biodiversity, and climate change have intensified (Johansson & Henriksson, 2020). The accelerating pace of global population growth, coupled with rapid urbanization, continues to push consumption levels to unprecedented highs, while natural resources remain finite and increasingly scarce (Angelis, 2018). This unsustainable trajectory is a significant driver of the ongoing environmental emergency (Furukawa et al., 2019). In response, many businesses are adopting strategies aimed at promoting sustainable production and consumption (Bengtsson et al., 2018). One such approach is the circular economy (CE), which focuses on minimizing resource consumption by reusing, recycling, and recovering materials throughout the production-consumption cycle (Korhonen et al., 2018; Schwanholz & Leipold, 2020). The CE seeks to overcome the take-make-dispose linear pattern of production and consumption, proposing a circular system in which the value of resources, materials, and products is maintained in the economy as long as possible (Kirchherr et al., 2017; Merli et al., 2018). It enables companies to decouple economic growth from natural resource depletion and environmental degradation through waste reduction, cleaner production, and extending product lifecycles (Frishammar & Parida, 2019; Nußholz, 2017). Accordingly, a circular economy aims for the creation of environmental (i.e., resilience of natural resources), social (i.e., minimization of social value destruction, such as the prevention of unhealthy working conditions in the extraction of raw materials and reuse), and economic value (i.e., increasing value of products and materials) (van Buren et al., 2016).

Although the concept of a circular economy dates back to the 1970s and draws inspiration from nature, widespread adoption of circular practices has only recently gained momentum in government, academia, and industry (Geissdoerfer et al., 2017; Ki et al., 2020). Recent research has increasingly focused on evaluating circular strategies and overcoming related barriers

(Bianchini et al., 2019; Kalmykova et al., 2018; Mangla et al., 2018), exploring the design, structure and operating of a circular business model (Bocken & Ritala, 2022; Geissdoerfer et al., 2018), investigating the role of digital platforms (Blackburn et al., 2023; Boukhatmi et al., 2023; Ciulli et al., 2020), and examining the interaction between firms and customers in circular business models (Calvo-Porral & Lévy-Mangin, 2020; Frishammar & Parida, 2019; Kahraman & Kazançoğlu, 2019).

The CE transcends organizational boundaries and includes suppliers, research centers, customers, universities and public authorities, which all play a specific role based on effective interorganizational relationships (Mostaghel & Chirumalla, 2021). Therefore, a circular business model must satisfy the needs of all involved stakeholders when seeking to improve resource efficiency (Frishammar & Parida, 2019; Re et al., 2021). As brands and customers are closely intertwined in the implementation of circular practices, practitioners are particularly interested in better understanding how to engage their customers in circular activities (Re et al., 2021). Hence, many researches have emphasized the role of customers when moving towards a circular business model (Calvo-Porral & Lévy-Mangin, 2020; Camacho-Otero et al., 2018; Chen et al., 2020; Wastling et al., 2018). To promote circularity, customers must be interested and involved in resource recirculation, which requires satisfying their specific needs, guiding them how to return or repair products and educating them on the environmental benefits of sustainable products, rather than merely making circular-driven products available (Hankammer et al., 2019; Kazeminia et al., 2016; Mostaghel & Chirumalla, 2021). In the implementation of circular practices, customers are thus deeply engaged in a continuous value co-creation process to jointly and synergistically find efficient ways to take responsibility for environmental issues in collaboration with brands aiming for a circular business model (Re et al., 2021). This mutual effort between brands and customers fosters a deeper commitment to

circularity and can be facilitated through interactions on engagement platforms (Blackburn et al., 2023).

Verleye et al. (2024) further enrich this understanding by conceptualizing actor engagement for circularity as a systemic and multi-actor process that unfolds over time and across levels. They highlight six key engagement practices that are essential in enabling circular transitions. *Signaling* refers to making circular initiatives visible and accessible to relevant actors. *Convincing* involves emotionally and rationally appealing to others to foster acceptance of circular practices. *Matching* focuses on aligning the needs, resources, and goals of different actors to facilitate collaboration. *Legitimizing* entails enhancing the credibility and acceptance of circular initiatives within a wider system. *Supporting* refers to providing operational, technical, or emotional assistance during implementation, and *empowering* focuses on strengthening the capabilities of actors to contribute meaningfully to circular efforts.

These practices are interrelated and evolve as actors interact, adapt, and progress in their circular efforts. To be effective, such engagement must foster shared understanding, mutual commitment, and aligned activities. Importantly, Verleye et al. (2024) stress the importance of designing engagement platforms and touchpoints that allow actors to interact meaningfully, develop circular knowledge, and co-create innovations tailored to systemic needs. By enabling sustained and multidirectional engagement, organizations can drive more inclusive and resilient circular transformations that go beyond isolated initiatives and scale circular practices throughout the value network.

2.2.3 References

Aguinis, H., & Glavas, A. (2019). On Corporate Social Responsibility, Sensemaking, and the Search for Meaningfulness Through Work. *Journal of Management*, *45*(3), 1057–1086. https://doi.org/10.1177/0149206317691575

Alvarado-Herrera, A., Bigne, E., Aldas-Manzano, J., & Curras-Perez, R. (2017). A Scale for Measuring Consumer Perceptions of Corporate Social Responsibility Following the Sustainable Development Paradigm. *Journal of Business Ethics*, *140*(2), 243–262. https://doi.org/10.1007/s10551-015-2654-9

Alvarez-Milán, A., Felix, R., Rauschnabel, P. A., & Hinsch, C. (2018). Strategic customer engagement marketing: A decision making framework. *Journal of Business Research*, *92*, 61–70. https://doi.org/10.1016/j.jbusres.2018.07.017

Angelis, R. de. (2018). *Business Models in the Circular Economy: Concepts, Examples and Theory*. Palgrave Pivot.

Bengtsson, M., Alfredsson, E., Cohen, M., Lorek, S., & Schroeder, P. (2018). Transforming systems of consumption and production for achieving the sustainable development goals: Moving beyond efficiency. *Sustainability Science*, *13*(6), 1533–1547. https://doi.org/10.1007/s11625-018-0582-1

Bhattacharya, C. B., & Sen, S. (2004). Doing Better at Doing Good: When, Why, and How Consumers Respond to Corporate Social Initiatives. *California Management Review*, *47*(1), 9–24. https://doi.org/10.2307/41166284

Bianchini, A., Rossi, J., & Pellegrini, M. (2019). Overcoming the Main Barriers of Circular Economy Implementation through a New Visualization Tool for Circular Business Models. *Sustainability*, *11*(23), 6614. https://doi.org/10.3390/su11236614

Blackburn, O., Ritala, P., & Keränen, J. (2023). Digital Platforms for the Circular Economy: Exploring Meta-Organizational Orchestration Mechanisms. *Organization & Environment*, *36*(2), 253–281. https://doi.org/10.1177/10860266221130717

Bocken, N., & Ritala, P. (2022). Six ways to build circular business models. *Journal of Business Strategy*, *43*(3), 184–192. https://doi.org/10.1108/jbs-11-2020-0258

Boukhatmi, Ä., Nyffenegger, R., & Grösser, S. N. (2023). Designing a digital platform to foster data-enhanced circular practices in the European solar industry. *Journal of Cleaner Production*, *418*, 137992. https://doi.org/10.1016/j.jclepro.2023.137992

Brammer, S., & Millington, A. (2005). Corporate Reputation and Philanthropy: An Empirical Analysis. *Journal of Business Ethics*, *61*(1), 29–44. https://doi.org/10.1007/s10551-005-7443-4

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer Engagement. *Journal of Service Research*, *14*(3), 252–271. https://doi.org/10.1177/1094670511411703

Calvo-Porral, C., & Lévy-Mangin, J.-P. (2020). The Circular Economy Business Model: Examining Consumers' Acceptance of Recycled Goods. *Administrative Sciences*, *10*(2), 28. https://doi.org/10.3390/admsci10020028

Camacho-Otero, J., Boks, C., & Pettersen, I. N. (2018). Consumption in the Circular Economy: A Literature Review. *Sustainability*, *10*(8), 2758. https://doi.org/10.3390/su10082758

Carlini, J., & Grace, D. (2021). The corporate social responsibility (CSR) internal branding model: Aligning employees' CSR awareness, knowledge, and experience to deliver positive employee performance outcomes. *Journal of Marketing Management*, *37*(7-8), 732–760. https://doi.org/10.1080/0267257X.2020.1860113

Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance. *Academy of Management Review*, *4*(4), 497–505. https://doi.org/10.5465/amr.1979.4498296

Chen, L.-H., Hung, P., & Ma, H. (2020). Integrating circular business models and development tools in the circular economy transition process: A firm-level framework. *Business Strategy and the Environment*, *29*(5), 1887–1898. https://doi.org/10.1002/bse.2477

Chernev, A., & Blair, S. (2015). Doing Well by Doing Good: The Benevolent Halo of Corporate Social Responsibility. *Journal of Consumer Research*, *41*(6), 1412–1425. https://doi.org/10.1086/680089

Choi, S., & Ng, A. (2011). Environmental and Economic Dimensions of Sustainability and Price Effects on Consumer Responses. *Journal of Business Ethics*, *104*(2), 269–282. https://doi.org/10.1007/s10551-011-0908-8

Ciulli, F., Kolk, A., & Boe-Lillegraven, S. (2020). Circularity Brokers: Digital Platform Organizations and Waste Recovery in Food Supply Chains. *Journal of Business Ethics*, *167*(2), 299–331. https://doi.org/10.1007/s10551-019-04160-5

Currás-Pérez, R., Dolz-Dolz, C., Miquel-Romero, M. J., & Sánchez-García, I. (2018). How social, environmental, and economic CSR affects consumer-perceived value: Does perceived consumer effectiveness make a difference? *Corporate Social Responsibility and Environmental Management*, *25*(5), 733–747. https://doi.org/10.1002/csr.1490

Dey, P. K., Petridis, N. E., Petridis, K., Malesios, C., Nixon, J. D., & Ghosh, S. K. (2018). Environmental management and corporate social responsibility practices of small and medium-sized enterprises. *Journal of Cleaner Production*, *195*, 687–702. https://doi.org/10.1016/j.jclepro.2018.05.201

Du, S., Bhattacharya, C. B., & Sen, S. (2011). Corporate Social Responsibility and Competitive Advantage: Overcoming the Trust Barrier. *Management Science*, *57*(9), 1528–1545. https://doi.org/10.1287/mnsc.1110.1403

Eberhard-Harribey, L. (2006). Corporate social responsibility as a new paradigm in the European policy: How CSR comes to legitimate the European regulation process. *Corporate Governance: The International Journal of Business in Society*, *6*(4), 358–368. https://doi.org/10.1108/14720700610689487

Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, *8*(1), 37–51. https://doi.org/10.1002/tqem.3310080106

Fatma, M., Rahman, Z., & Khan, I. (2015). Building company reputation and brand equity through CSR: The mediating role of trust. *International Journal of Bank Marketing*, *33*(6), 840–856. https://doi.org/10.1108/ijbm-11-2014-0166

Frishammar, J., & Parida, V. (2019). Circular Business Model Transformation: A Roadmap for Incumbent Firms. *California Management Review*, *61*(2), 5–29. https://doi.org/10.1177/0008125618811926

Furukawa, R., Suto, Y., Ishida, E. H., & Yamauchi, T. (2019). *Lifestyle and nature: Integrating nature technology to sustainable lifestyles*. Pan Stanford Publishing.

Geissdoerfer, M., Morioka, S. N., Carvalho, M. M. de, & Evans, S. (2018). Business models and supply chains for the circular economy. *Journal of Cleaner Production*, *190*, 712–721. https://doi.org/10.1016/j.jclepro.2018.04.159

Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production*, *143*, 757–768. https://doi.org/10.1016/j.jclepro.2016.12.048

Gong, S., Sheng, G., Peverelli, P., & Dai, J. (2021). Green branding effects on consumer response: examining a brand stereotype-based mechanism. *Journal of Product & Brand Management*, *30*(7), 1033–1046. https://doi.org/10.1108/JPBM-03-2020-2785

Gupta, S., Czinkota, M., & Melewar, T. C. (2013). Embedding knowledge and value of a brand into sustainability for differentiation. *Journal of World Business*, *48*(3), 287–296. https://doi.org/10.1016/j.jwb.2012.07.013

Hajli, N., Shanmugam, M., Papagiannidis, S., Zahay, D., & Richard, M.-O. (2017). Branding co-creation with members of online brand communities. *Journal of Business Research*, *70*, 136–144. https://doi.org/10.1016/j.jbusres.2016.08.026

Hankammer, S., Brenk, S., Fabry, H., Nordemann, A., & Piller, F. T. (2019). Towards circular business models: Identifying consumer needs based on the jobs-to-be-done theory. *Journal of Cleaner Production*, *231*, 341–358. https://doi.org/10.1016/j.jclepro.2019.05.165

Huang, Y.-C., Yang, M., & Wang, Y.-C. (2014). Effects of green brand on green purchase intention. *Marketing Intelligence & Planning*, *32*(3), 250–268. https://doi.org/10.1108/MIP-10-2012-0105

Iglesias, O., Markovic, S., Bagherzadeh, M., & Singh, J. J. (2020). Co-creation: A Key Link Between Corporate Social Responsibility, Customer Trust, and Customer Loyalty. *Journal of Business Ethics*, *163*(1), 151–166. https://doi.org/10.1007/s10551-018-4015-y

Johansson, N., & Henriksson, M. (2020). Circular economy running in circles? A discourse analysis of shifts in ideas of circularity in Swedish environmental policy. *Sustainable Production and Consumption*, *23*, 148–156. https://doi.org/10.1016/j.spc.2020.05.005

Joyce, A., & Paquin, R. L. (2016). The triple layered business model canvas: A tool to design more sustainable business models. *Journal of Cleaner Production*, *135*, 1474–1486. https://doi.org/10.1016/j.jclepro.2016.06.067

Kahraman, A., & Kazançoğlu, İ. (2019). Understanding consumers' purchase intentions toward natural-claimed products: A qualitative research in personal care products.

Business Strategy and the Environment, *28*(6), 1218–1233. https://doi.org/10.1002/bse.2312

Kalmykova, Y., Sadagopan, M., & Rosado, L. (2018). Circular economy – From review of theories and practices to development of implementation tools. *Resources, Conservation and Recycling*, *135*, 190–201. https://doi.org/10.1016/j.resconrec.2017.10.034

Kang, J., & Hustvedt, G. (2014). Building Trust Between Consumers and Corporations: The Role of Consumer Perceptions of Transparency and Social Responsibility. *Journal of Business Ethics*, *125*(2), 253–265. https://doi.org/10.1007/s10551-013-1916-7

Kazeminia, A., Hultman, M., & Mostaghel, R. (2016). Why pay more for sustainable services? The case of ecotourism. *Journal of Business Research*, *69*(11), 4992–4997. https://doi.org/10.1016/j.jbusres.2016.04.069

Keller, K. L. (2003). Brand Synthesis: The Multidimensionality of Brand Knowledge. *Journal of Consumer Research*, *29*(4), 595–600. https://doi.org/10.1086/346254

Ki, C.-W., Chong, S. M., & Ha-Brookshire, J. E. (2020). How fashion can achieve sustainable development through a circular economy and stakeholder engagement: A systematic literature review. *Corporate Social Responsibility and Environmental Management*, *27*(6), 2401–2424. https://doi.org/10.1002/csr.1970

Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation and Recycling*, *127*, 221–232. https://doi.org/10.1016/j.resconrec.2017.09.005

Korhonen, J., Honkasalo, A., & Seppälä, J. (2018). Circular Economy: The Concept and its Limitations. *Ecological Economics*, *143*, 37–46. https://doi.org/10.1016/j.ecolecon.2017.06.041

Lafferty, B. A. (2007). The relevance of fit in a cause–brand alliance when consumers evaluate corporate credibility. *Journal of Business Research*, *60*(5), 447–453. https://doi.org/10.1016/j.jbusres.2006.09.030

Lee, S. Y., Kim, Y [Yeuseung], & Kim, Y [Young] (2021). Engaging consumers with corporate social responsibility campaigns: The roles of interactivity, psychological empowerment, and identification. *Journal of Business Research*, *134*, 507–517. https://doi.org/10.1016/j.jbusres.2021.05.062

Luo, X., & Bhattacharya, C. B. (2006). Corporate Social Responsibility, Customer Satisfaction, and Market Value. *Journal of Marketing*, *70*(4), 1–18. https://doi.org/10.1509/jmkg.70.4.001

Mangla, S. K., Luthra, S., Mishra, N., Singh, A., Rana, N. P., Dora, M., & Dwivedi, Y. (2018). Barriers to effective circular supply chain management in a developing country context. *Production Planning & Control*, *29*(6), 551–569. https://doi.org/10.1080/09537287.2018.1449265

Maon, F., Lindgreen, A., & Swaen, V. (2010). Organizational Stages and Cultural Phases: A Critical Review and a Consolidative Model of Corporate Social Responsibility Development. *International Journal of Management Reviews*, *12*(1), 20–38. https://doi.org/10.1111/j.1468-2370.2009.00278.x

Marin, L., & Ruiz, S. (2007). “I Need You Too!” Corporate Identity Attractiveness for Consumers and The Role of Social Responsibility. *Journal of Business Ethics*, *71*(3), 245–260. https://doi.org/10.1007/s10551-006-9137-y

Marin, L., Ruiz, S., & Rubio, A. (2009). The Role of Identity Salience in the Effects of Corporate Social Responsibility on Consumer Behavior. *Journal of Business Ethics*, *84*(1), 65–78. https://doi.org/10.1007/s10551-008-9673-8

Martinez-Conesa, I., Soto-Acosta, P., & Palacios-Manzano, M. (2017). Corporate social responsibility and its effect on innovation and firm performance: An empirical research in SMEs. *Journal of Cleaner Production*, *142*, 2374–2383. https://doi.org/10.1016/j.jclepro.2016.11.038

Merli, R., Preziosi, M., & Acampora, A. (2018). How do scholars approach the circular economy? A systematic literature review. *Journal of Cleaner Production*, *178*, 703–722. https://doi.org/10.1016/j.jclepro.2017.12.112

Mostaghel, R., & Chirumalla, K. (2021). Role of customers in circular business models. *Journal of Business Research*, *127*, 35–44. https://doi.org/10.1016/j.jbusres.2020.12.053

Mubushar, M., Rasool, S., Haider, M. I., & Cerchione, R. (2021). The impact of corporate social responsibility activities on stakeholders' value co-creation behaviour. *Corporate Social Responsibility and Environmental Management*, *28*(6), 1906–1920. https://doi.org/10.1002/csr.2168

Nicholls, A. (2010). The Legitimacy of Social Entrepreneurship: Reflexive Isomorphism in a Pre–Paradigmatic Field. *Entrepreneurship Theory and Practice*, *34*(4), 611–633. https://doi.org/10.1111/j.1540-6520.2010.00397.x

Nußholz, J. (2017). Circular Business Models: Defining a Concept and Framing an Emerging Research Field. *Sustainability*, *9*(10), 1810. https://doi.org/10.3390/su9101810

Öberseder, M., Schlegelmilch, B. B., Murphy, P. E., & Gruber, V. (2014). Consumers’ Perceptions of Corporate Social Responsibility: Scale Development and Validation. *Journal of Business Ethics*, *124*(1), 101–115. https://doi.org/10.1007/s10551-013-1787-y

Osei-Frimpong, K., & McLean, G. (2018). Examining online social brand engagement: A social presence theory perspective. *Technological Forecasting and Social Change*, *128*, 10–21. https://doi.org/10.1016/j.techfore.2017.10.010

Peloza, J., & Shang, J. (2011). How can corporate social responsibility activities create value for stakeholders? A systematic review. *Journal of the Academy of Marketing Science*, *39*(1), 117–135. https://doi.org/10.1007/s11747-010-0213-6

Pérez, A., & Del Rodríguez Bosque, I. (2015). Corporate social responsibility and customer loyalty: Exploring the role of identification, satisfaction and type of company. *Journal of Services Marketing*, *29*(1), 15–25. https://doi.org/10.1108/jsm-10-2013-0272

Popoli, P. (2011). Linking CSR strategy and brand image. *Marketing Theory*, *11*(4), 419–433. https://doi.org/10.1177/1470593111418795

Porter, M. E., & Kramer, M. R. (2018). Creating Shared Value. In *Managing Sustainable Business* (pp. 323–346). Springer Netherlands. https://doi.org/10.1007/978-94-024-1144-7_16

Re, B., Magnani, G., & Zucchella, A. (2021). The Future of Sustainability: Value Co-creation Processes in the Circular Economy. In S. Park, M.-A. Gonzalez-Perez, & D. E. Floriani (Eds.), *The Palgrave handbook of corporate sustainability in the digital era* (1. ed. 2021, pp. 503–527). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-42412-1_25

Sang, Y., & Han, E. (2023). A win-win way for corporate and stakeholders to achieve sustainable development: Corporate social responsibility value co-creation scale development and validation. *Corporate Social Responsibility and Environmental Management*, *30*(3), 1177–1190. https://doi.org/10.1002/csr.2412

Schwanholz, J., & Leipold, S. (2020). Sharing for a circular economy? An analysis of digital sharing platforms' principles and business models. *Journal of Cleaner Production*, *269*, 122327. https://doi.org/10.1016/j.jclepro.2020.122327

Sen, S., & Bhattacharya, C. B. (2001). Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility. *Journal of Marketing Research*, *38*(2), 225–243. https://doi.org/10.1509/jmkr.38.2.225.18838

Sheth, J. N. (2020). Customer value propositions: Value co-creation. *Industrial Marketing Management*, *87*, 312–315. https://doi.org/10.1016/j.indmarman.2019.10.012

Tian, Z., Wang, R., & Yang, W. (2011). Consumer Responses to Corporate Social Responsibility (CSR) in China. *Journal of Business Ethics*, *101*(2), 197–212. https://doi.org/10.1007/s10551-010-0716-6

van Buren, N., Demmers, M., van der Heijden, R., & Witlox, F. (2016). Towards a Circular Economy: The Role of Dutch Logistics Industries and Governments. *Sustainability*, *8*(7), 647. https://doi.org/10.3390/su8070647

Verleye, K., Keyser, A. de, Raassens, N., Alblas, A. A., Lit, F. C., & Huijben, J. C. C. M. (2024). Pushing Forward the Transition to a Circular Economy by Adopting an Actor Engagement Lens. *Journal of Service Research*, *27*(1), 69–88. https://doi.org/10.1177/10946705231175937

Vlachos, P. A., Tsamakos, A., Vrechopoulos, A. P., & Avramidis, P. K. (2009). Corporate social responsibility: Attributions, loyalty, and the mediating role of trust. *Journal of the Academy of Marketing Science*, *37*(2), 170–180. https://doi.org/10.1007/s11747-008-0117-x

Wastling, T., Charnley, F., & Moreno, M. (2018). Design for Circular Behaviour: Considering Users in a Circular Economy. *Sustainability*, *10*(6), 1743. https://doi.org/10.3390/su10061743

Zheng, X., Cheung, C. M. K., Lee, M. K., & Liang, L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology & People*, *28*(1), 90–106. https://doi.org/10.1108/ITP-08-2013-0144

Chapter 3: Implications of digital customer engagement for CSR

Chapter 3 builds on the theoretical foundation of CSR-oriented customer engagement introduced in Chapter 2. It examines how brands can leverage DEPs to promote customer engagement with respect to the social, ecological, and economic dimensions of CSR. The chapter comprises two empirical studies that are methodologically and conceptually connected.

The first paper employs a qualitative case study approach combining netnographic research with semi-structured interviews. It explores how gamified LPs, exemplified by the adidas adiClub, enable and facilitate value co-creation through digital engagement practices. Furthermore, it identifies the underlying social, economic, and ecological purposes guiding brands' use of engagement practices in the context of CSR. Building on these insights, the second paper adopts a quantitative approach to extend the findings of the first study. Drawing on the engagement forms identified qualitatively, it examines how different types of engagement within OBCs affect customers' sustainable brand perception along the economic, social, and ecological dimensions of the TBL.

Therefore, this chapter aims to advance a nuanced and comprehensive understanding of the ways in which digital customer engagement contributes to the social, ecological, and economic dimensions of CSR.

3.1 How gamified loyalty programs enable and facilitate value co-creation: A case study within a sports-related service context (Research Paper 1)

Authors Frederic Dreher, University of Bayreuth, Germany

Prof. Dr. Tim Ströbel, University of Bayreuth, Germany

Published in Dreher, F., & Ströbel, T. (2023). How gamified online loyalty programs enable and facilitate value co-creation: a case study within a sports-related service context. *Journal of Service Theory and Practice*, 33(5), 671–696.

https://doi.org/10.1108/JSTP-10-2022-0229

ABSTRACT

Purpose: The aim of this paper is to gain insights from a case study into how gamified loyalty programs enable and facilitate value co-creation and what underlying purpose organizations pursue when engaging with members in such a program.

Design/methodology/approach: A multimethod approach is deployed consisting of an observational and an explorative study. The authors collaborate with adidas, one of the leading (sports) retailers in the world. A five-month netnographic study is conducted on the adiClub, the online loyalty program of adidas. Based on the findings of this first study, semi-structured in-depth interviews were conducted in a second study with adidas managers from diverse backgrounds currently involved in projects and day-to-day work related to the adiClub. The exclusive interview data provide further insights and help interpret and validate the netnographic observations.

Findings: Most value co-creation studies on engagement platforms in marketing relate to social media, physical events, or online forums. Based on the multimethod approach of this study, existing research is extended on how online loyalty programs enable and facilitate value

co-creation. Furthermore, the authors identify the organizational purpose behind engaging in value co-creation practices along the social, economic, and ecological dimensions.

Originality/value: Increased gamification driven by the advances of digital transformation enables and facilitates value co-creation, which initiates unprecedented digital sales potential for service organizations. Research about the digital transformation of value co-creation remains scarce. The authors seek to address this research gap by focusing on value co-creating activities within online loyalty programs.

Implications: This case study offers implications for organizations on how online loyalty programs enable and facilitate value co-creation through gamification. In addition, it connects the value co-creation practices with the respective purpose that organizations pursue with related activities. Hence, it further enhances the knowledge and repertoire of managers for setting up and running gamified online loyalty programs.

Keywords: *Gamified loyalty programs; value co-creation; social practice theory; digital engagement practices; triple bottom line*

3.1.1 Introduction

Loyalty programs exist across a wide range of industries and have become a popular means of strengthening the continuing exchanges between customers and service provider (Hoffman & Lowitt, 2008; Lacey & Sneath, 2006). Driven by the latest advances of digital transformation, opportunities for firms to engage with customers have increased (Blasco-Arcas et al., 2016; Lamberton & Stephen, 2016). Loyalty programs have evolved into digital platforms where firms provide a wide variety of services and experiences to their customers (Tobon et al., 2020). The role of customers has changed beyond recipients of offerings to co-creators of value and beyond the mere exchange of goods and services to co-creational experiences (Cambra-Fierro et al., 2018; Conduit & Chen, 2017; Gouillart & Ramaswamy, 2014). Due to these developments, the interest of firms and service research in the topic of gamification has increased in recent years (Hammedi et al., 2017; Mulcahy et al., 2018). Gamification can be defined as the process of using game-design elements in non-game services to enhance customer's value creation (Hofacker et al., 2016). Accordingly, gamified activities offered through an online loyalty program increase customer interaction, thereby fostering value co-creation (Deterding, 2019; Wünderlich et al., 2020). Prominent companies like Nike, Sephora or Starbucks offer gamified loyalty programs to engage with their customers and co-create value (Nastasoiu & Vandenbosch, 2019; Ramaswamy & Ozcan, 2016). Nevertheless, managers still struggle to obtain a holistic view of which value co-creating practices can be used in a gamified loyalty program and how these will affect their business. Existing studies have focused on how loyalty programs should be designed (Bombaij & Dekimpe, 2020; Kim et al., 2021), how they perform (Steinhoff & Palmatier, 2016; Yi & Jeon, 2003), and how they are impacted by new technologies (Hollebeek, Das, & Shukla, 2021; Hwang & Choi, 2020). However, current studies remain scarce on how gamified online loyalty

programs enable and facilitate value co-creation and how firms' underlying purposes can be linked to engagement practices.

Therefore, building on netnography and in-depth interviews in collaboration with adidas, one of the biggest (sports) retailers in the world, this study contributes to theory and practice in two ways. First, it explains how a gamified loyalty program enables and facilitates value co-creation by examining practices occurring in the adiClub. The findings extend exisiting research and provide novel insights into how firms should engage with customers in loyalty programs to co-create value. Secondly, it draws on the three dimensions of the triple bottom line (TBL)—social, economic, and ecological (Elkington, 1998c)—to explain the underlying purpose that firms pursue when engaging in value co-creating practices with their customers. This study focuses on all three dimensions due to their high relevance for running a sustainable business in the long-term. The corresponding research questions are as follows:

1) How do gamified loyalty programs of service providers enable and facilitate value co-creation?

2) How can the purpose of operating gamified online loyalty programs be linked to engagement practices?

The remaining study is structured as follows. First, a literature review is conducted on loyalty programs, their role for value co-creation and practices suitable for examining value co-creation. Second, the used methodology is introduced consisting of a netnographic study followed by semi-structured interviews. Next, we address above research questions by presenting and discussing our findings. Lastly, implications for theory and practice are provided and limitations are outlined.

3.1.2 Theoretical background

3.1.2.1 The co-creation of value

Following S-D logic (Vargo & Lusch, 2004), recent research has acknowledged the importance of studying the highly interactive nature of value co-creation in different service contexts (Tari Kasnakoglu, 2016), with customers playing a crucial role as determiners of value (Tommasetti et al., 2017). Value co-creation occurs through dynamic, complex relationships and interactions among networks of firms, customers, and other relevant stakeholders (T. Chen et al., 2017). Due to the increasingly crucial role of customers for value co-creation, the concept of customer engagement behavior (CEB) emerged. van Doorn et al. (2010, p. 253) define CEB as "the customers' behavioral manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers." Since no actor alone possesses all the required resources to create value (Vargo & Lusch, 2010), engagement platforms as the locus of interactive exchange are crucial for enabling value co-creation (Breidbach & Brodie, 2017). Following Breidbach et al.'s (2014, p. 594) definition, engagement platforms are "physical or virtual touch points designed to provide structural support for the exchange and integration of resources, and thereby co-creation of value between actors in a service ecosystem." They offer an environment where customer engagement is possible; that is, they facilitate the undertaking of specific experiences between a focal agent (e.g., a customer) and an object (e.g., a brand, product, or organization) (Brodie et al., 2011).

In recent decades, advances in information and communications technology have paved the way for digital engagement platforms (Gensler et al., 2013), enabling individuals to connect worldwide across multiple channels (Ramaswamy & Ozcan, 2016). Different types of digital engagement platforms have evolved (Stegmann et al., 2023), including online loyalty programs.

3.1.2.2 Value co-creation in gamified loyalty programs

A loyalty program can be described as an integrated system of customized and structured marketing activities with the goal to build and maintain customer relationships (Bijmolt, 2010). Design elements include strategic decisions about tiers, accessibility, currency, partnerships, reward types and operational details (Kim et al., 2021). The tier structure determines how many hierarchical levels exist, with more tiers increasing customers' perception of loyalty and status (Drèze & Nunes, 2009). Additionally, loyalty programs can be either publicly accessible, which prompts greater in-group identification as customers have control over their enrollment, or closed where required company approval evokes higher gratitude (Esmark et al., 2016). Currency refers to the way value is exchanged between the company and its customers. The most common currencies are points and miles, which result in customers appreciating rewards more due to the illusion of a scale (more bonus points) and certainty (linear point distribution) (Hsee et al., 2003). Partnerships with other companies allow the customers to collect and redeem points both at the focal company and its partners and lead to higher cross-sales, expanded redemption choices and faster point accumulation (Lemon & Wangenheim, 2009). Finally, companies need to determine the type of rewards. Hard benefits are usually economic, e.g. providing rebates or special discounts for past purchases, while soft benefits are generally not economic in nature and encompass exclusive member benefits that go beyond financial incentives (Gable et al., 2008). These benefits focus on customer engagement beyond transactions and enable value co-creation by serving as an emotional tie that binds the customers to the retailer and encourages them to integrate their resources through interaction (Gable et al., 2008; Hollebeek, Das, & Shukla, 2021). Hence, loyalty programs are a crucial customer relationship management tool used to engage with, award and retain customers as well as reinforce customers' purchase behaviors (Chaudhuri et al., 2019; Y. Chen et al., 2021).

In the early stages of loyalty programs, possibilities of companies to reach out to their customers, engage with them and offer rewards were quite limited (Y. Chen et al., 2021). Technological advancements have recently resulted in new opportunities for the management of loyalty programs as digitalization has facilitated new ways of interacting with customers and personalizing rewards based on customers' purchase history (Tong et al., 2020). The growth and diffusion of online loyalty programs have led to a fast proliferation of the gamification phenomenon in service design (Deterding et al., 2011). Gamification serves as a means to create a connection with customers by utilizing game-play mechanics, such as points, levels, feedback or rewards (Mulcahy et al., 2018). For example, Airbnb uses badges to guide users on how to use the service, create trust between host and guests, and improve the quality of the offered service (Pasca et al., 2021). The peculiarity of the gamification phenomenon is that the experience is moved outside of the natural gaming context (Xu et al., 2017). Instead, gamification is intended to orchestrate processes and services that push customers to co-create value through the provision of positive experiences (Deterding, 2019). Companies can increase customers' commitment and loyalty, and enhance their engagement with other stakeholders, such as employees and other loyalty program members (Wünderlich et al., 2020). Accordingly, the underlying aim of gamification is to engage the members of the loyalty program through the application of game mechanics and dynamics (Sigala, 2015). As a result, experiences and services are co-created through the gamified interactions between service providers and loyalty program members (Pasca et al., 2021). As the co-creation of value is gamified, it brings enjoyment, fun and social connection, thereby driving engagement and loyalty (Sailer et al., 2017). Hence, gamification allows to increase and improve the variety of services and experiences of online loyalty programs, thereby revolutionizing how companies and customers interact, facilitating value co-creation and strengthening customer ties (Pasca et al., 2021; Tobon et al., 2020). However, despite the high relevance of online loyalty programs for

stimulating customer engagement through gamification and increasing loyalty (Pasca et al., 2021), we are yet to understand how they enable and facilitate value co-creation with customers.

3.1.2.3 Value co-creation through digital engagement practices

When researching the role of (online) loyalty programs for value co-creation, practices can serve as a well-suited foundation to examine how customers interact with the firm and among each other (Akaka et al., 2013). Recent advances in S-D logic move toward social constructivism and understand reoccurring practices as crucial means of value co-creation (Vargo & Lusch, 2016a). According to Schau et al. (2009, p. 31), practices are "linked and implicit ways of understanding, saying, and doing things." Practices "comprise a temporally unfolding and spatially dispersed nexus of behaviors that include practical activities, performances, and representations or talk." Thus, practices are repeated actions used to co-create value by allowing people to develop shared meanings and show competencies that reinforce social order (Reckwitz, 2002; Schau et al., 2009).

In this study, the authors decided to deploy the practices introduced by Schau et al. (2009) because they fit well with the study's research purpose, allowing to capture how value is co-created in an online loyalty program. Furthermore, they are well established in marketing literature and were already applied in similar research contexts (Busca & Bertrandias, 2020; Grohs et al., 2020; He et al., 2017). As the practices were originally intended by Schau et al. (2009) only as a means to examine interactions among members of brand communities, we reviewed additional practice literature specific to interactions between firms and customers within loyalty programs. The overlaps in the meaning of the practices specific to loyalty programs were considerable with the practices introduced by Schau et al. (2009). Hence, the practices of Schau et al. (2009) are applicable to this study's context. We cater to the advances in research on actor engagement (Brodie et al., 2019; Storbacka et al., 2016) and therefore

argue that practices are not to be restricted to interactions among brand community members but are applicable to interactions among actors in general. Marketers as companies and their employees become part of the community by communicating with their members about the brand, services, opportunities and specific events in the online loyalty program (Ardley et al., 2020; Habibi et al., 2014; Skålén, Pace, & Cova, 2015). This means that the practices are performed by both members and employees of the company in a co-creation process where employees enable and facilitate interactions with and among members in the loyalty program (Lombardo & Cabiddu, 2017). To be in line with more recent research on practices occurring in loyalty programs (Habibi et al., 2014; Kim et al., 2021; Pasca et al., 2021; Skålén, Pace, & Cova, 2015), we focus on six out of the twelve practices identified by Schau et al. (2009) for our purposes.

First, the thematic category of *social networking* is about enabling, strengthening, and sustaining ties among members of the brand community. It entails the practices of *welcoming*, *empathizing,* and *governing.* In this study, the focus is on the practice of *governing*, which deals with the behavioral expectations within the brand community. A related practice specific to loyalty programs was introduced by Kim et al. (2021), who define *rule clarity* as the degree to which firms clearly communicate the conditions how members of the loyalty program have to behave to receive rewards and increase their status in the member community. In addition, Pasca et al. (2021) introduced the practice of *sustainable behavior,* which sets the behavioral expectation that both firms and members of the loyalty program should adopt environmentally friendly behavior by engaging in events and initiatives related to sustainability. Lastly, Habibi et al. (2014) and Skålén, Pace, and Cova (2015) confirm that *governing* entails efforts of both marketers and members of the loyalty program to govern behavior by engaging in discussions and reminders of the norms. Therefore, this study refers to *governing* as the extent to which the firm and members of the loyalty program communicate their behavioral expectations of the

loyalty program and its community. The second thematic category, *impression management*, is externally focused and meant to create a positive image of the community. It comprises two practices: (1) *Evangelizing* means inspiring others to use the brand by sharing good news, exciting experiences, and interesting facts. A related practice is *reward visibility*, which reflects the salience of a reward to other members of the loyalty program through firm induced program mechanisms or member induced word of mouth (Kim et al., 2021). In addition, Habibi et al. (2014) refer to *evangelizing* by mentioning that marketers share links, videos, pictures and news with the community to engage with the members and trigger positive member reactions. Hence, *evangelizing* is defined as customer interaction with the firm, its employees and other customers to spread good news, share received rewards and talk about exciting experiences and opportunities. (2) *Justifying* refers to members explaining why they spend time on brand community-related activities. This is closely related to the practice of *engagement factors,* which investigates the factors and incentives firms use to motivate customers to engage in activities in the gamified loyalty program (Pasca et al., 2021). *Community engagement*, the third category, is described as the reinforcement of member engagement. In this study, we focus on the practice of *staking*, which is defined as acknowledging variance within the brand community. This corresponds to the practice specific to loyalty programs of *providing financial incentives to selected customers* (Gable et al., 2008)*,* as it implies that firms should distinguish members of the loyalty program, e.g. based on their level or points collected. Similarly, Kim et al. (2021) define *reward exclusivity* as limiting specific rewards to a small group of customers only. Further, Skålén, Pace, and Cova (2015) introduce the practice of *mirroring,* which corresponds to *staking* and allows marketers to define differences among members in the online loyalty program. Therefore, this study understands *staking* as the practice of firms identifying and addressing intra-group differences within the loyalty program. The fourth and last thematic category is called *brand use*, which deals with enhancing or improving the use of

the focal brand. This study focuses on the two practices *grooming* and *customizing*. (1) *Grooming* entails establishing optimal patterns of how to use products/services and understand their features and intended purpose. Habibi et al. (2014) underline this practice by stating that members and marketers of the brands comprise a repository of knowledge about how to best use the online loyalty program and its products and services. Another related practice is *learn about the brand*, which suggests that firms should provide customers with information and updates on their services and products, how these can be used and what special features characterize them (Eigenraam et al., 2018b). Hence, *grooming* is associated with firms' efforts to help the customer understand the products and services provided through the loyalty program, the context in which to use them and how they differ from competitors' offers. (2) *Customizing* means tailoring offers to the specific needs of certain subgroups or individuals (Habibi et al., 2014; Schau et al., 2009). This corresponds to *identifying customer preferences and recording them to guide future actions* (Gable et al., 2008), which means that firms need to approach loyalty program members differently based on their respective interests. Above introduced practices will help to examine how value co-creation is enabled and facilitated in gamified loyalty programs. Next, we will review the different purposes that firms pursue when engaging with their customers through gamified activities.

3.1.2.4 Linking digital engagement practices to firms' purposes

TBL will serve as our means of assessing the purpose of firms behind offering gamified activities in online loyalty programs. This framework is suitable because modern loyalty programs go beyond economic incentives. Increasingly, they include social aspects, such as recognition, personalized communications and offerings, or personal invitations to special events, and ecological aspects, such as sustainability workshops or specific events related to reducing the environmental impact (Bruneau et al., 2018). First introduced by Elkington (1998c), TBL is a concept that incorporates the three dimensions of profit, people, and the

planet. If companies achieve outstanding triple bottom line performance by focusing on their economic, social, and ecological responsibilities, they will be able to run a sustainable business and attain long-term success (Elkington, 1998c). Economic value is defined as firms' responsibility to "produce goods and services that society wants and sell them at a profit" (Carroll, 1979, p. 500). This allows businesses to continue existing on a strong financial footing (Conway, 2018). Social value refers to the relationship of the firm with its socio-cultural environment and covers a multitude of aspects, such as community relations, sponsorship, charitable donations, or initiatives helping disadvantaged groups (Currás-Pérez et al., 2018a; Elkington, 1998a). In this study, the social dimension of TBL is defined as an organization's mission to create benefit and well-being for its stakeholders and society through events and initiatives that support local communities or strengthen the ties among members of the loyalty program (Joyce & Paquin, 2016). Finally, the ecological dimension is observed as firms' environmentally friendly behavior, specifically in terms of promoting eco-friendly products, improving waste management, optimally using natural resources, and minimizing ecological externalities in production processes (Currás-Pérez et al., 2018a).

Therefore, this study links firms' purposes along these three dimensions to digital engagement practices occurring on the adiClub.

3.1.3 Methodology

3.1.3.1 The adidas adiClub

We intend to answer the aforementioned research questions using the adidas adiClub as single case study. In line with well-established definitions of (online) loyalty programs, the adiClub is a non-geographically bound, customer-centric marketing program that is designed to strengthen customer relationships and build customer loyalty. The adiClub was first launched in the US in 2018 and has since rolled out to eight additional markets. By now, millions of members use adiClub, engaging in local and global activities across sports and

interacting with the brand and other members. We deliberately chose our research object from the sports industry owing to its extraordinary identification potential, unusually high loyalty, strong emotions, and well-established traditions. As adidas is one of the most well-known companies worldwide, customer interactions are manifold, allowing us to derive valuable and diverse findings. The adiClub therefore serves as an ideal case to investigate how gamified loyalty programs enable and facilitate value co-creation practices and how the latter are linked to the firm's underlying social, economic and ecological purposes.

3.1.3.2 Case study set up

Considering that our topic is related to contemporary developments in value co-creation and requires in-depth analysis, the case study approach is an appropriate research method (Yin, 2014). Its main goal is analyzing a contemporary phenomenon in depth and within its real-world context (Yin, 2014). This study utilizes a single case study approach, through which we can effectively capture reality by studying the adidas adiClub in its natural context and by identifying and evaluating various practices through which economic, social and ecological value is co-created (Cavaye, 1996a). Yin (2014a) showed that a single case study aims to contribute to knowledge by providing a detailed and complete description of an emerging phenomenon.

We used a multimethod research approach to collect data by employing two qualitative research methods (Teddlie & Tashakkori, 2009). We began with a netnographic study on the adidas adiClub, followed by in-depth interviews with adidas managers in a second follow-up study. We deliberately chose to rely on a research approach consisting of two qualitative studies as the examined phenomenon is still in its early stages. Hence, additional in-depth insights gained through qualitative findings are required to understand how value can be co-created through gamification in an online loyalty program. While the netnographic study allowed to

generate initial findings on how customers engage with adidas on the adiClub, the semi-structured interviews were required to complement these findings and add more depth to them.

3.1.3.3 Study 1: Netnographic study

Netnography is a naturalistic, unobtrusive method of inquiry that allows to investigate virtual communities without the researcher's interference in community members' activities (Cova & Pace, 2006; Kozinets, 2002). It emerged as an adaptation of some premises of ethnographic research and may be used to study online-exchanged information, predominantly text supplemented by images, videos, and symbols (Kozinets, 2012). Kozinets (2002) states that an effective netnographic study requires persistent observation and researcher introspection. We followed the methodological procedures for conducting netnography as outlined by Kozinets (2006): making entrée (i.e., identification of the online platform and formulation of research question), data collection, analysis, interpretation (classification, coding, and contextualization), and compliance with ethical standards. Using Microsoft Excel, data was collected by observing the text, images, and videos from adidas adiClub and related content on social media (LinkedIn, Facebook, Instagram) over five months (July 2021 to December 2021). In total, 643 posts and 14,614 associated comments were analyzed and sorted out based on level of detail, relevance for our purposes and coherence, allowing to derive valuable insights on activities and interactions across adiClub and social media platforms.

3.1.3.4 Study 2: Semi-structured in-depth interviews

To obtain a better understanding of the results from study 1, we complemented the netnographic study by using Microsoft Teams to conduct qualitative interviews with adidas managers from different departments who are or were involved in projects related to the adiClub (see table 3.1-1). We deliberately chose managers working in different sports as each sport has its own specificities resulting in different priorities, project, activities and ways of

interaction. Furthermore, one manager from the Membership team, responsible for the core strategy of adiClub, was interviewed to gain additional insights.

I1	Senior Manager Digital Commerce	Outdoor
I2	Global Manager Digital Commerce	Outdoor
I3	Senior Manager Digital Membership Activation	Soccer
I4	Campaign Manager	Running
I5	Digital Commerce Execution Manager	Outdoor
I6	Manager Membership EU	Membership Team
I7	Global Manager Digital Commerce Mobile Experience	Outdoor
I8	Global Membership Operations Manager	Membership Team
I9	Digital Commerce Manager Data & Analytics	Outdoor

Note: We created this table for this article; it is not based on any previously published table.

Table 3.1-1: Overview of the position and business unit by interview partner

We conducted semi-structured in-depth interviews to allow open-ended answers and manifold findings (Alvesson & Deetz, 2000). This type of interview involves preparing questions to direct the conversation toward the relevant topics and issues (Qu & Dumay, 2011a). As it is flexible, intelligible, accessible, and capable of providing detailed insights into the research topic (Qu & Dumay, 2011a), this approach was appropriate for our purposes. We conducted nine interviews, each lasting between 26 and 40 minutes. We stopped conducting further interviews once they did not yield any meaningful new insights and new data did not lead to new patterns in the data coding process (Aguinis & Solarino, 2019; Charmaz, 2006). Interviews were transcribed verbatim—excluding fillers, non-verbal communication, and stutters, which might detract from the actual content of the interviewee's words (MacLean et al., 2004b).

3.1.3.5 Data analysis

In *MAXQDA*, two researchers independently analyzed the data from the netnographic study and in-depth interviews using codes representing the social practices and value outcomes introduced above. We followed the fundamental steps of categorization, abstraction, comparison, and integration outlined by Spiggle (1994b) and G. McCracken (1988). All information was reviewed, dissected meaningfully, and labeled, using Miles and Huberman's (1994a) coding approach as a guideline. During the coding process, the researchers identified social practices, which could not be subsumed under one of the developed codes. Therefore, they agreed on two new practices and one new thematic category; appropriate codes were developed accordingly.

Both researchers relied on the same final coding guide, which provided explanations of all codes. Explanations were mainly based on the aforementioned definitions of social practices (Schau et al., 2009) and value outcomes (Carroll, 1979; Currás-Pérez et al., 2018a; Joyce & Paquin, 2016), complemented by some illustrative examples. For example, the code description for the practice of *justifying* entails a short definition—deploying rationales for investing time and effort to the brand—and instances where the practice would be relevant, such as justification through doing something good for society, the community or the environment. This allowed both researchers to obtain a suitable understanding of the meaning and purpose of the different codes. The researchers could then conduct the coding based on their respective subjective assessments. In total, 1,175 codings were allocated to text segments of our two studies (568 by researcher one and 607 by researcher two). To measure the quality of the independent coding by the two researchers, intercoder reliability was assessed. With Cohen's kappa (Cohen, 1960b, 1968b) at k = .82 for coded interviews and k = .86 for coded netnographic observations, reliability is satisfactory (Landis & Koch, 1977).

3.1.4 Findings

Our findings support the four thematic categories of social practices introduced by Schau et al. (2009) and complement the latter with a new fifth thematic category (see tables 3.1-2 to 3.1-6). Through our multimethod approach, comprising netnography and semi-structured in-depth interviews, we could identify the category of *community bonding and shaping*, which goes beyond *community engagement* and refers to how the community can increasingly manifest itself and develop further. It contains two practices. (1) *Appreciating* is derived from the practices *edutainment*, which is the combination of educating customers and providing entertainment (Pasca et al., 2021), and *for fun,* which entails offering games, experiences and contests to members of the loyalty program (Eigenraam et al., 2018b). Hence, *appreciating* encompasses particular non-transactional brand- or community-related items or activities that are introduced by marketers and highly valued by the community members. (2) *Collaborating* corresponds to the practice of *work for the brand* through providing assistance and making advertisements (Eigenraam et al., 2018b). However, it is not restricted to the customer to business context but also entails business to business relationships. It describes how the firm includes community members, business partners, and other relevant stakeholders to work together on the future of the brand community (e.g., via workshops, and feedback loops).

3.1.4.1 Social networking

According to Schau et al. (2009), social networking relates to creating, strengthening, and sustaining ties among members of the brand community. On adiClub, we identified that

governing occurs in manifold situations. adidas uses a four-level tiering system where members need to collect points to reach a higher membership level. The rules for collecting points are set by adidas and are communicated to its members through the online loyalty program. The related behavioral expectation is that members are keen to engage with adidas to collect points, level up and unlock new opportunities (I3). In the process of collecting points,

gamification plays a crucial role as points can be earned through participating in playful activities and challenges. For example, I1 states:

> *"By giving our members the chance to collect points, they perceive activities as more exciting. For example, we have a give back program where our members can send us their old garments and we will use everything that is recyclable. In return, they are rewarded with points they can use to e.g. get a discount on new products. This really makes it more fun for the members and they are happy to engage with us on it."* (I1)

The underlying purpose in above example is primarily ecological owing to members' participation in sustainability-driven activities. While *governing* spans across manifold activities that could differ in purpose, we argue that in the vast majority of observed cases adidas cares most about promoting environmental behavior. I7 emphasizes the ecological purpose of *governing* by stressing the high priority of setting rules that ensure environmentally-friendly behavior and communicating these to the community members.

> "*The adidas outdoor mission is that we want consumers or members to live a conscious, connected and adventurous life; […] It's cleaning your trails, it's going in the nature and connecting with nature.*" (I7)

As a result, value is co-created through the interaction between adidas and adiClub members because adidas communicates to its members how to behave environmentally friendly and members use this information to act accordingly. This is reflected in the netnographic observations. For instance, adidas offered community runs, such as Run for the Oceans or Run Wild, where gamification was related to running as many kilometers as possible in a certain period of time to remove plastics from the oceans or compete against a mountain lion to raise awareness for this endangered species. All these activities have served the purpose to communicate to customers that adidas cares about sustainability and expects its community members to behave environmentally friendly. In turn, the proactive communication of adidas

on how they expect their members to behave triggers member reactions on what they expect from adidas. Accordingly, a social media user made the following proposition, which results in value co-creation due to adidas reflecting its own behavior and potentially acting on the advice:

> *@adidas thank you for giving food for thought. Here's mine: We can't do without plastic and sportswear often contains it because it makes the textiles more functional. […] adidas should pursue the goal that every piece of plastic gets at least a second life, i.e. use recycled fibers. Preferably as soon and as vast as possible!*

Category	Practice	Underlying purpose	Example activity from study 1 (netnography)	Example quote from study 2 (interviews)
Social networking	Governing	Ecological	adidas works together with UNEP and Internet of Elephants to raise awareness for endangered species. They expect from their community to participate in the challenge, share it with friends and followers, upload pictures and videos on social media, and donate for this good cause.	"For instance, during our first CC week last year in 2020, we also gave 1500 members the opportunity to sign up to already test out the futurecraft loop, which is a made to be remade recyclable running shoe, which is super inspiring." (I6)

Note: We created this table for this article; it is not based on any previously published table.

Table 3.1-2: Social networking

3.1.4.2 Impression management

Impression management is about having an external focus on fostering favorable impressions of the brand and its community (Schau et al., 2009). On the adiClub, *justifying* occurs when adidas offers activities to its members that motivate them to engage with adidas and allow them to give good reasons for their engagement. By providing an environment in which members enjoy spending their time, adidas takes the role of facilitating members to perform *justifying* through the adiClub. Examples from the netnographic study are unique experiences you can win through raffles (e.g. work out with professional athlete) or by participating in meaningful challenges (e.g. Run Wild) and possibilities to directly impact product designs via testing sessions or rating mechanisms. Gamification plays a vital role as raffle mechanisms usually entail game like features, such as quizzes or scavenger hunts, while

feedback mechanisms are gamified through collecting points in exchange for providing feedback. In this context, exclusivity plays an important role as members can justify their engagement with the fun activities and the benefits available in the loyalty program. I3 confirms that this is in line with the strategy of adidas related to the loyalty program.

> *"I would say exclusivity is better, so what the members get is more exclusive." (I3)*

A social media user adds to this by justifying towards others his engagement in the Run Wild challenge:

> *Thanks for this meaningful event. Happy to support, time to run! Let's all do this together* 💔🔥🔥

The underlying purpose of *justifying* is primarily economic as adidas benefits by collecting valuable customer feedback for future products or enhancing the members' product and brand knowledge through raffles and challenges. Therefore, the gamified loyalty program enables and facilitates *justifying* because it allows reaching out to customers worldwide with above-mentioned activities.

Regarding *evangelizing*, adidas strives to go forward and invites members to co-create experiences and share them with the brand community.

> *"I think they* [members] *are now invited on December 6th or 7th to watch Bayern vs. Barcelona. A cool game. We will then record that, meaning the journey, how they are picked up, how they get to the stadium, how they can follow the game there in the VIP area. We then try to record and communicate it accordingly via our social media and among our members themselves. Therefore, we hope that our members will share what they have experienced and do word-of-mouth marketing." (I3)*

Gamification was used to motivate members to engage. Through the adiClub, members were involved into a playful mechanism requiring them to investigate facts about the teams to get the chance to join the event. By offering such a gamified activity, adidas provided the means

for facilitating *evangelizing* among the members. Even before the winner was determined, members started to post about the raffle on social media.

> *Very cool! I will participate – exciting opportunity!* 👏👏👏 *#adidas #adiClub #BayernvsBarcelona* 🤩

In addition, another member added to *evangelizing* by posting the following about the adidas brand on social media:

> *A great mission using recycled ocean plastic to produce shoes! I really appreciate how adidas takes serious efforts to reduce environmental impact. I even used Run for the Oceans as a case study in a course on engineering impact on the environment that I have been lecturing.*

This is highly relevant because members promoting the brand and sharing the benefits of the adiClub with others helps adidas acquire new members and increase the engagement of existing low-level members. An increased member base and higher engagement of existing members lead to economic value through a higher customer lifetime value.

> *"This means that with every member you get, you also have more sales, and with every direct engagement that we drive, we see that the customer lifetime value from members is significantly higher than from those who are not members." (I2)*

Category	**Practice**	**Underlying purpose**	**Example activity from study 1 (netnography)**	**Example quote from study 2 (interviews)**
Impression management	Evangelizing	Economic	adidas works together with different sports clubs participating in the Champions League to give members the possibility to win tickets to one of the matches, including a stadium tour. Members share with others the good news that being part of the community involves such great opportunities.	"Right now we of course already see on social media that people tag us and based on those tags we are then also able to grab that content from social media, which is also great for internal purposes." (I6)
	Justifying	Economic	adidas posts several new running shoe designs that could be released into the market in the future; members can rate (1-5 stars) and receive +50 CC points. Members justify their time invest by receiving points and having an actual say in what products adidas will be launching.	"If you now give them such an interesting task or such an interesting opportunity to actively contribute, you also have the possibility to arouse a bit the intrinsic motivation of the members." (I2)

Note: We created this table for this article; it is not based on any previously published table.

Table 3.1-3: Impression management

3.1.4.3 Community engagement

Through the practice of *staking* adidas is continuously trying to better understand its members and detect intragroup similarities and differences. Knowing that there is variance within the adiClub community, adidas engages differently with subsets of members. This leads to different subgroups in the community, which encourages *staking* and social differentiation among the member base (Schau et al., 2009). For example, Habibi et al. (2014) found evidence for *staking* on Facebook where "Jeep Grand Cherokee Owners" exists as a sub-community of the Jeep community with over 1000 members. In the case of the adiClub, adidas provides many different types of events and activities, which facilitates the practice of *staking* as individual members can identify themselves more easily with a particular domain within the loyalty program. As I6 emphasizes, members have different interests.

> *"It is all about engaging with different types of affinities across our members. Thus, some people might like football more, so that is okay." (I6)*

Further, I8 adds to it by stressing the intragroup differences within the loyalty program.

> *"If you say you are doing something in cycling, you have to look for people who are enthusiastic about cycling, where you know any way that they are super active, but you do not need to send it to the entire community." (I8)*

Additionally, there are intragroup distinctions across countries and member levels. Efforts of adidas to account for intragroup differences in the adiClub become evident in the netnographic observations. For example, a user comments on social media how she appreciates that adidas distinguishes between its members and takes efforts to communicate that people of all cultures are welcomed in the community.

> *Love this! So important to teach and learn about different cultures* 💔 👏

Relatedly, *staking* helps adidas managers to identify which types of gamification are relevant for each of the subgroups, as some subgroups might be more interested in having a gamelike mechanism in place to compete with others, while other subgroups might be more keen on learning more about popular athletes through quizzes, stories or videos. The purpose of *staking* is predominantly economic. This is because the better adidas manages to identify intragroup distinctions and similarities, the more effectively they can interact with their members and support them. As I1 points out, *staking* fosters member engagement and acquisition of new members.

> *"Something in this direction will certainly come soon because NFT offers this opportunity to expand our community further. […] It is also a good way to be interesting for Generation Z, one of the largest focus groups in the future. Thus, we do everything we can to attract them because of course they are young, they hopefully have a long life ahead of them. We want to engage them as early as possible to present relevant topics and make them a part of our community." (I1)*

Category	Practice	Underlying purpose	Example activity from study 1 (netnography)	Example quote from study 2 (interviews)
Community engagement	Staking	Economic	adidas takes efforts to better understand its members, detect intragroup similarities and differences, and build subsets of members.	"But if you then go a bit more into the details, you realize you have very specific member groups on adiClub [...], let's say some that are mainly interested in cool lifestyle." (I8)

Note: We created this table for this article; it is not based on any previously published table.

Table 3.1-4: Community engagement

3.1.4.4 Community bonding and shaping

To increasingly bond with members and work together on the future of the adiClub, *appreciating* is a highly relevant practice. It entails interacting with members through exciting and delighting co-creating activities to strengthen member engagement in the loyalty program. Consequently, while members enjoy joining challenges, raffles, testing sessions or workshops, adidas values engaging with and investing time in their members, giving room to learn about

their interests, bond with them, and find out what they would like to see implemented in the adiClub in the future. I6 highlights adidas' efforts to bond with its members through offering extraordinary rewards:

> *"We also have one last thing called the surprise and delight feature. Surprise and delight are that we surprise our members as if they are almost an influencer with a product and say, hey, we know you like football; we see you spent quite a lot of money on football this year. We know you like it, so here is the new predator* [football boots] *that we are launching soon, and you get it before anyone else, so that is somewhat like a behind the scene surprise […]." (I6)*

The primary purpose of *appreciating* is social by giving something back to the members of the loyalty program and showing them that they and their input are valued. Through gamification, members' feeling of being appreciated is strengthened as they are increasingly rewarded when investing their time and resources, collecting points and reaching higher membership levels. As I4 outlines:

> *"The reason why we give these offers and exclusive things to our members, that has to do everything with keeping our members happy and them also wanting to level up to the next level to unlock even more of what we have to offer. We want to build lasting relationships with our customers and that can only happen when they feel valued and we take efforts to offer exciting events and raffles to them that are not driven by financial motives on our end." (I4)*

We identified *collaborating* as another practice that adidas uses when cooperating with members or business partners on the adiClub. It allows enhancing gamification by engaging in joint events and activities, thereby leveraging the network and the gamified mechanisms of the partners. For example, partners could post stories with rating options on social media or test members' knowledge on how they collaborate with adidas. The underlying purpose of

collaborating differs depending on the collaboration's mutual goal. For example, adidas' partnership with Parley in Run for the Oceans was ecologically motivated by reducing plastic waste in the oceans. As findings from the netnographic study show this was a highly successful event, thus demonstrating the importance of *collaborating*.

> *If you still need running motivation, here it is!! Running and doing something good at the same time - it doesn't get any better than this. We #RunForTheOceans* 🙌🔥

Another social media post adds to this by emphasizing the importance of *collaborating* within the community.

> *Let's build a stronger community together and let's work together to make our earth a better place.* 👏👏👏🌳🌳🌳❤️❤️❤️

In contrast, teaming up with the Oetztal tourism region followed an economic purpose by promoting the Oetztal as a prominent holiday region and by using the raffled trip to introduce new adidas products to members. Finally, social value can, for example, be the outcome of joint sports activities, such as the cross-skiing crash course, during which adiClub members engage with each other, adidas, and former athletes. As I1 comments with respect to *collaborating:*

> *"Of course, we try to work with partners where we think combining what we can offer and what the partner can offer creates additional value. It is also important that we bring a certain authenticity to the field that we want to operate in, namely, the outdoors. That is why we try to work with relevant partners from the outdoor sector, so that the customer can see that we are an authentic outdoor brand." (I1)*

Category	**Practice**	**Underlying purpose**	**Example activity from study 1 (netnography)**	**Example quote from study 2 (interviews)**
Community bonding and shaping	Appreciating	Social	adidas talked to Thiago and made it possible that members can take part in an online soccer training led by him.	"I call it money can't buy experiences, that we offer things to the customer that they can't otherwise buy in any form. For example, we have a trail running camp with our athletes, where we then invite

			customers who are interested in trail running." (I1)
Collaborating	Social	adidas works together with Oetztal tourism region and cross skiing experts to offer its community members the chance to jointly participate in a cross skiing crash course.	"So we need to think less in adidas wins or the customer wins but think more about how can the world win or how can we enable this group, this community to really engage in sports and get access to sport experiences or facilities that they wouldn`t usually get." (I5)
	Ecological	adidas works together with Parley to design a challenge where each kilometre run results in the equivalent of 10 plastic bottles being removed from the oceans.	"For example, we implemented Run Wild for the third time this year, where we dealt with endangered wild species and also worked directly with UNEP and collected donations for endangered animal species that protects mountain lions." (I4)
	Economic	adidas works together with its Creator`s Club members to design future products, such as new swimming truncks.	"Especially customers who are going to be out there, e.g. the tester that we had for the Free Hiker, he was able to send real-time feedback as he was doing that 250 mile track to be able to give feedback to the team to make changes." (I9)

Note: We created this table for this article; it is not based on any previously published table.

Table 3.1-5: Community bonding and shaping

3.1.4.5 Brand Use

Finally, brand use practices focus on improved or increased use of the brand (Schau et al., 2009). Accordingly, we identified that the practice of *customizing* is of utmost relevance to ensure the continued interest of members in the adiClub. Knowing this, adidas allows its members to indicate their interests such that they are only offered co-creating activities they care about. For instance, adidas offered a fashion-related raffle exclusively for members interested in lifestyle. Gamification took place by asking members to answer questions related to the designer of the raffled product, their knowledge about the designer's latest collection and their personal fashion interests. Relatedly, I6 states the following:

> *"We offer customized experiences because some of them generate more excitement than others for certain subgroups of members. So if you can win a meet and greet with Messi it is interesting to members interested in soccer, while track and field athletes might prefer a meet and greet with a track and field professional." (I6)*

The purpose is economical because *customizing* allows for more individual targeting of members, resulting in a higher likelihood to keep members engaged, interested and satisfied.

Lastly, *grooming* enables members to understand how to use the brand's products and services and find out more about them. By offering members different ways of communicating with the brand and among each other about products and services, adidas manages to make it easier for members to engage in the practice of *grooming*. As I1 states:

> *"We use raffles and test sessions to convince customers of our products, so we explain to them special features, for example that products are made from recycled materials, and also what needs to be considered when using them, especially when it comes to more complex products like in climbing or ski touring. Also, we then try […] to involve the customer more in product development […] to get their knowledge and ideas for our products from the customer's perspective." (I1)*

Accordingly, the underlying purpose of adidas is primarily economic because the more members learn about the brand's products and services, the more likely they will buy them.

Category	Practice	Underlying purpose	Example activity from study 1 (netnography)	Example quote from study 2 (interviews)
Brand use	Grooming	Economic	adidas holds a digital session to allow members to get to know the Terrex brand, the team behind it and its outdoor products.	"Then we also have something that`s called an open event and within an open event it is more information actually. We just inform people about the products that we have available for instance." (I6))
	Customizing	Economic	adidas offers its CC members with an affinity in winter sports the possibility to win a cross skiing crash course.	"If you say you are doing something in the field of cycling, then you really have to look for people who are enthusiastic about cycling, where you know anyway that they are super active." (I8)

Note: We created this table for this article; it is not based on any previously published table.

Table 3.1-6: Brand use

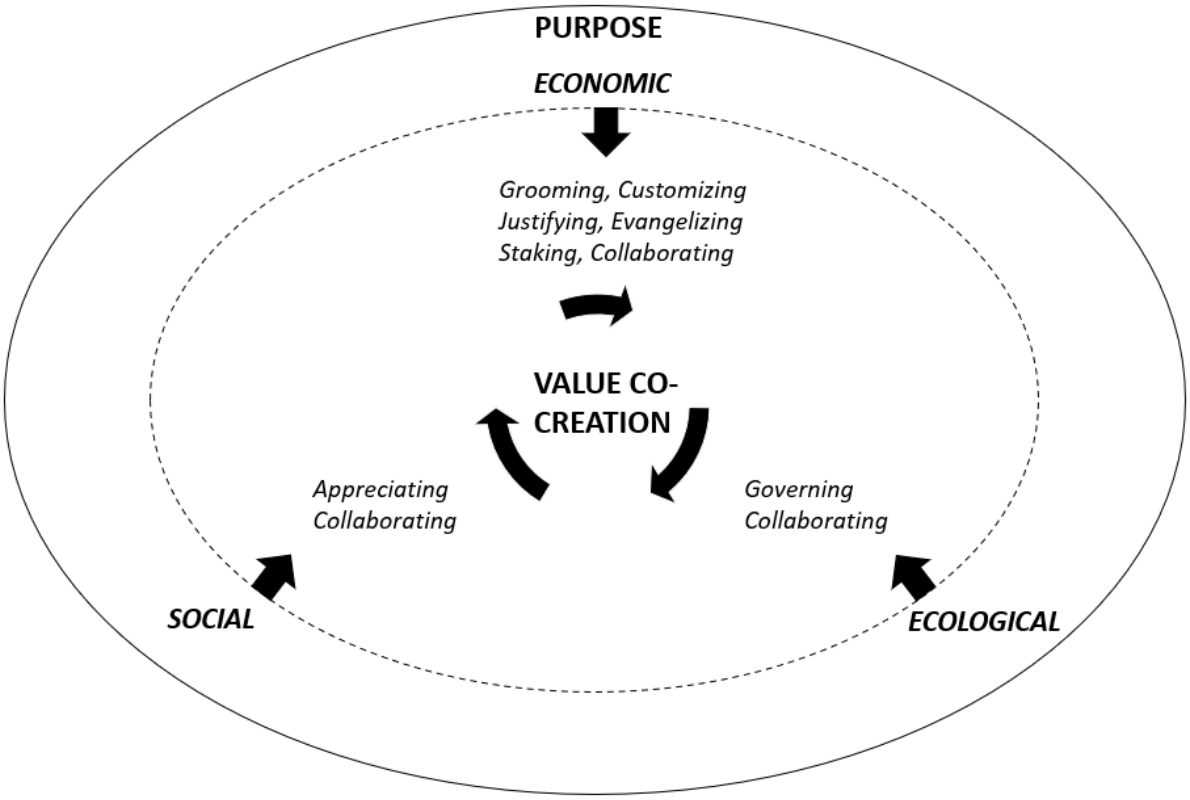
3.1.5 Discussion

Findings show that the underlying purpose is purely economic for five of the eight identified practices (see figure 3.1-1). This makes sense for the two practices *evangelizing* and

justifying as corresponding value co-creating activities are meant to create favorable impressions of the brand. adidas achieves this by providing customers access to exclusive events and activities on the adiClub, which require customers' active participation and lead to a positive perception of the brand through associating it with exciting interaction possibilities. Accordingly, value is co-created through the integration of resources of both employees of adidas and members. Gamification plays a vital role in this context as it increases customers' willingness to engage. As the two above practices entail specific experiences and events that foster interaction, gamification goes beyond collecting points. It entails introducing playful experiences, such as scavenger hunts for specific icons on the adiClub or possibilities to join running events where you can compare with others through a leaderboard. Another practice with an underlying economic purpose is *staking*. For adidas, it is a prerequisite to find ways to differentiate its members and identify intragroup similarities and differences in order to be able to provide targeted offers to subsets of members. Hence, the purpose behind *staking* is to identify customers' preferences, e.g. by asking for their sports interests in the context of a raffle or challenge, and segment them into respective subgroups. Closely related, *customizing* builds on the detected intragroup differences derived from *staking*. Accordingly, adidas is able to provide customized offerings that delight members of the loyalty program and are meant to increase customers' willingness to purchase. As gamification can occur in manifold ways, *staking* and *customizing* help adidas to better understand the preferences of each subgroup and use this information to provide gamified offerings on a case-by-case basis. For example, subgroups which are most interested in collecting points to level up must be offered gamified activities that address this goal, while others might be more interested in socializing by connecting with other members in playful experiences. Lastly, grooming was found to have an underlying economic purpose because the better customers know a product or service, the higher the likelihood they buy into it or use it.

Nevertheless, findings from this study suggest that not everything is driven by economic purpose. *Governing* was found to be mainly motivated by ecological purposes of adidas. Through *governing* adidas communicates to their members its core values that serve as foundation for all interaction. For example, adidas strives to educate its customer on how to behave environmentally friendly by cleaning trails, reducing plastic waste or donating for endangered species. In turn, members communicate to adidas their ideas on how adidas can evolve into an even more sustainable company. As members could perceive setting and communicating rules negatively, it is particularly important to convey these rules in a gamified manner. adidas does this by introducing behavioral expectations through playful experiences. For example, employees of adidas created an event in collaboration with business partners, which raised awareness for environmental consciousness and endangered species by giving the opportunity to virtually run against a mountain lion. In addition, the practice of *appreciating* is used by adidas to show members through gamified activities and charitable events on the adiClub how much they value the exchange and interaction with their community. Hence, the primary purpose of related adiClub activities is social as these are meant to give something back to members and increase the feeling of togetherness within the community by making members happy. Finally, *collaborating* with business partners enhances the repertoire of game like mechanisms and experiences that adidas can offer its members on the adiClub. *Collaborating* was found to be subject to different purposes depending on the type of cooperation with business partners, customers and other stakeholders. For example, adidas partnered up with Parley in Run for the Oceans to reduce plastic waste in the oceans, thereby pursuing an ecological purpose. In other cases, adidas focused more on social aspects by *collaborating* with athletes and coaches to offer meditation and yoga sessions or cross skiing crash courses to its community members. Regarding *collaborating* for an economic purpose, adidas oftentimes teamed up with credible partners from the specific industry. For example,

when promoting new outdoor products, adidas was found to cooperate with service providers, such as Komoot or Indie Campers.



Note: We created this figure for this article; it is not based on any previously published image.

Figure 3.1-1: Value co-creating practices and underlying purposes in gamified loyalty programs

3.1.6 Theoretical contributions

First, this study adds to existing literature on loyalty programs by examining how digital transformation and the increasingly relevant role of gamification have changed the way firms engage with their customers. Several practices of value co-creation were identified on the adiClub. While in the past, customers only played a passive role in loyalty programs by receiving rewards for spending money on the firm's products and services, gamification has changed the role of customers beyond recipients of offerings to co-creators of value (Gouillart & Ramaswamy, 2014; Hammedi et al., 2017; Hwang & Choi, 2020). Hence, this study provides

novel insights into how customers interact and co-create value with firms through their online loyalty programs.

Second, our netnographic study on the adiClub combined with the in-depth interviews with managers from adidas allowed to identify a fifth thematic category of social practices specific to gamified loyalty programs, thus enabling the extension of the previous contributions of Schau et al. (2009). *Community bonding and shaping* practices are important requirements for online loyalty programs as the latter have no geographical base (Pasca et al., 2021; Stegmann et al., 2023), making it difficult to convince members to actively join and stay part of the loyalty program (Jang et al., 2008). As a result, this study identified a new thematic category with its practices *appreciating* and *collaborating* allowing to better classify co-creating activities. *Appreciating* allows to account for the emotional connectedness of members with the brand resulting from meaningful and exciting interaction possibilities, while *collaborating* ensures that cooperations with other businesses are considered as a crucial means of value co-creation in an online loyalty program.

Third, we contribute to the literature by building on the fact that firms must go beyond economic aspects to run a successful and sustainable business in the long term (Du et al., 2011). In the past, loyalty programs only served the purpose to motivate customers to buy more (Palmatier et al., 2009; Yi & Jeon, 2003). However, this has changed as customers expect companies to take a more differentiated approach that also considers social and ecological aspects. Using TBL, this study complements literature on loyalty programs by providing valuable findings into the underlying purposes of firms to engage in co-creating activities with their customers. Using the adiClub evidence, five practices are interpreted as having an economic purpose, while three practices are interpreted as having an underlying ecological or social purpose. This stresses the importance of this study because loyalty programs have

evolved from pure drivers of sales to gamified programs expected to address economic, social and ecological aspects through co-creating activities.

3.1.7 Managerial implications

This study has manifold implications for service providers. Popular brands—such as Nike (Ramaswamy & Ozcan, 2016), Sephora (Nastasoiu & Vandenbosch, 2019), and adidas—have already established gamified loyalty programs but still struggle to fully understand how value is co-created through their engagement with customers. First, we provide managers with a comprehensive overview of the activities that enable and facilitate value co-creation and explain how value co-creation occurs when engaging with members in these activities. Relatedly, we stress the importance of gamification and illustrate how gamification can go beyond providing a tiering system and collecting points. We do this by introducing a wide variety of playful experiences and mechanisms that managers can use in their gamified loyalty program to co-create value. For example, adidas uses running events to link the activity of running to game like elements. In the case of Run for the Oceans, members could run to remove plastics from the oceans as each run kilometer was worth an equivalent weight of ten plastic bottles. Additionally, managers could use game like quizzes to engage their members. adidas uses such quizzes frequently to allow members to prove their knowledge about the brand, athletes or products but also to inform its members about upcoming events, product launches or new partnerships. For special upcoming events, managers could also introduce scavenger hunts in the online loyalty program where members who were able to find all hidden icons get rewarded with points or participation in the event. Another way to engage with members in a playful manner is to ask them to create user-generated content. For instance, adidas gamified workouts by letting members produce their own content and share it with adidas. adidas then chose the best workout and published it online, so that all members could try to complete it and collect points by doing so. Finally, managers should make use of (online) workshops to engage

their members and co-create value. Workshops allow for gamification because members engage with each other and the brand in fun activities, thereby integrating their resources in a playful manner. For example, employees of adidas hosted a workshop on sustainable gift wrapping during Christmas time where members received a number of subsequent, game like tasks to eventually become perfect gift wrappers.

Secondly, we cater to managers' need to better understand how they should engage with their customers when pursuing economic, social or ecological purposes. This is particularly relevant as companies are interested in better grasping what happens when engaging in co-creating activities with customers, business partners, and other relevant stakeholders. If brands are confident that fostering value co-creation in a gamified loyalty program will help them run a sustainable business in the long run, they will be willing to invest resources continuously. Thus, this study helps explain this matter by examining how identified practices are linked to the underlying social, economic and ecological purposes of adidas. This allows managers to design and operate their loyalty program judiciously using the aforementioned practices. Managers can consciously decide the underlying purpose that they intend to strive for. For example, they can actively control the extent to which they offer practices with economic purpose, allowing to find a desirable balance within the TBL triangle. Using gamified online loyalty programs effectively allows managers to spark a powerful reinforcing cycle of value co-creation, foster community engagement and strengthen community ties. Furthermore, it helps managers to overcome the common challenge of low member engagement in online loyalty programs. While firms have recently realized that it is important to involve customers more actively in the process of value creation, today's online loyalty programs still tend to be primarily transactional in nature. By moving beyond rewarding members only for purchases, managers can differentiate their loyalty programs from the large amount of others, thereby increasing latter's attractiveness and fostering engagement.

3.1.8 Limitations and future research

First, we conducted two studies, a netnographic study and semi-structured in-depth interviews, within a single case study setting. While we are confident that the findings from these studies are transferrable to other companies, future research must confirm this and substantiate our findings with evidence from gamified loyalty programs of other service providers across different industries. Second, future research could explore identified practices in more depth from the customer perspective as this study focuses primarily on the service providers' activities. Third, it will be important for future research to add quantitative results to understand to what extent practices in gamified loyalty programs foster value co-creation and how they affect brand meaning and loyalty.

3.1.9 References

Aguinis, H., & Solarino, A. M. (2019). Transparency and replicability in qualitative research: The case of interviews with elite informants. *Strategic Management Journal.* Advance online publication. https://doi.org/10.1002/smj.3015

Akaka, M. A., Schau, H. J., & Vargo, S. L. (2013). The Co-Creation of Value-in-Cultural-Context. In R. W. Belk, L. Price, & L. Peñaloza (Eds.), *Research in Consumer Behavior. Consumer Culture Theory* (Vol. 15, pp. 265–284). Emerald Group Publishing Limited. https://doi.org/10.1108/S0885-2111(2013)0000015018

Alvesson, M., & Deetz, S. (2000). *Doing Critical Management Research*. SAGE Publications Ltd. https://doi.org/10.4135/9781849208918

Ardley, B., McIntosh, E., & McManus, J. (2020). From transactions to interactions: The value of co-creation processes within online brand consumer communities. *Business Process Management Journal*, *26*(4), 825–838. https://doi.org/10.1108/BPMJ-10-2019-0444

Bijmolt, T. H. A. (2010). Loyalty Programs: Generalizations on Their Adoption, Effectiveness and Design. *Foundations and Trends® in Marketing*, *5*(4), 197–258. https://doi.org/10.1561/1700000026

Blasco-Arcas, L., Hernandez-Ortega, B. I., & Jimenez-Martinez, J. (2016). Engagement platforms: The role of emotions in fostering customer engagement and brand image in interactive media. *Journal of Service Theory and Practice*, *26*(5), 559–589. https://doi.org/10.1108/JSTP-12-2014-0286

Bombaij, N. J., & Dekimpe, M. G. (2020). When do loyalty programs work? The moderating role of design, retailer-strategy, and country characteristics. *International Journal of Research in Marketing*, *37*(1), 175–195. https://doi.org/10.1016/j.ijresmar.2019.07.003

Breidbach, C., & Brodie, R. J. (2017). Engagement platforms in the sharing economy. *Journal of Service Theory and Practice*, *27*(4), 761–777. https://doi.org/10.1108/JSTP-04-2016-0071

Breidbach, C., Brodie, R., & Hollebeek, L. (2014). Beyond virtuality: from engagement platforms to engagement ecosystems. *Managing Service Quality*, *24*(6), 592–611. https://doi.org/10.1108/MSQ-08-2013-0158

Brodie, R. J., Fehrer, J. A., Jaakkola, E., & Conduit, J. (2019). Actor Engagement in Networks: Defining the Conceptual Domain. *Journal of Service Research*, *22*(2), 173–188. https://doi.org/10.1177/1094670519827385

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer Engagement. *Journal of Service Research*, *14*(3), 252–271. https://doi.org/10.1177/1094670511411703

Bruneau, V., Swaen, V., & Zidda, P. (2018). Are loyalty program members really engaged? Measuring customer engagement with loyalty programs. *Journal of Business Research*, *91*, 144–158. https://doi.org/10.1016/j.jbusres.2018.06.002

Busca, L., & Bertrandias, L. (2020). A Framework for Digital Marketing Research: Investigating the Four Cultural Eras of Digital Marketing. *Journal of Interactive Marketing*, *49*, 1–19. https://doi.org/10.1016/j.intmar.2019.08.002

Cambra-Fierro, J., Melero-Polo, I., & Sese, F. J. (2018). Customer value co-creation over the relationship life cycle. *Journal of Service Theory and Practice*, *28*(3), 336–355. https://doi.org/10.1108/JSTP-01-2017-0009

Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance. *Academy of Management Review*, *4*(4), 497–505. https://doi.org/10.5465/amr.1979.4498296

Cavaye, A. (1996). Case study research: a multi-faceted research approach for IS. *Information Systems Journal*, *6*(3), 227–242. https://doi.org/10.1111/j.1365-2575.1996.tb00015.x

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE. http://www.loc.gov/catdir/enhancements/fy0657/2005928035-d.html

Chaudhuri, M., Voorhees, C. M., & Beck, J. M. (2019). The effects of loyalty program introduction and design on short- and long-term sales and gross profits. *Journal of the Academy of Marketing Science*, *47*(4), 640–658. https://doi.org/10.1007/s11747-019-00652-y

Chen, T., Ou Yang, S., & Leo, C. (2017). The beginning of value co-creation: Understanding dynamics, efforts and betterment. *Journal of Service Theory and Practice*, *27*(6), 1145–1166. https://doi.org/10.1108/JSTP-12-2015-0257

Chen, Y., Mandler, T., & Meyer-Waarden, L. (2021). Three decades of research on loyalty programs: A literature review and future research agenda. *Journal of Business Research*, *124*, 179–197. https://doi.org/10.1016/j.jbusres.2020.11.057

Cohen, J. (1960). A Coefficient of Agreement for Nominal Scales. *Educational and Psychological Measurement*, *20*(1), 37–46. https://doi.org/10.1177/001316446002000104

Cohen, J. (1968). Weighted kappa: Nominal scale agreement with provision for scaled disagreement or partial credit. *Psychological Bulletin*, *70*(4), 213–220. https://doi.org/10.1037/h0026256

Conduit, J., & Chen, T. (2017). Transcending and bridging co-creation and engagement: Conceptual and empirical insights. *Journal of Service Theory and Practice*, *27*(4), 714–720. https://doi.org/10.1108/JSTP-05-2017-0077

Conway, E. (2018). *Contemporary Issues in Accounting: The Current Developments in Accounting Beyond the Numbers*. Palgrave Macmillan US. https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=5493413

Cova, B., & Pace, S. (2006). Brand community of convenience products: new forms of customer empowerment – the case "my Nutella The Community". *European Journal of Marketing*, *40*(9/10), 1087–1105. https://doi.org/10.1108/03090560610681023

Currás-Pérez, R., Dolz-Dolz, C., Miquel-Romero, M. J., & Sánchez-García, I. (2018). How social, environmental, and economic CSR affects consumer-perceived value: Does perceived consumer effectiveness make a difference? *Corporate Social Responsibility and Environmental Management*, *25*(5), 733–747. https://doi.org/10.1002/csr.1490

Deterding, S. (2019). Gamification in Management: Between Choice Architecture and Humanistic Design. *Journal of Management Inquiry*, *28*(2), 131–136. https://doi.org/10.1177/1056492618790912

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness. In *Proceedings of the 15th International Academic MindTrek Conference on Envisioning Future Media Environments - MindTrek '11*. ACM Press. https://doi.org/10.1145/2181037.2181040

Drèze, X., & Nunes, J. C. (2009). Feeling Superior: The Impact of Loyalty Program Structure on Consumers' Perceptions of Status. *Journal of Consumer Research*, *35*(6), 890–905. https://doi.org/10.1086/593946

Du, S., Bhattacharya, C. B., & Sen, S. (2011). Corporate Social Responsibility and Competitive Advantage: Overcoming the Trust Barrier. *Management Science*, *57*(9), 1528–1545. https://doi.org/10.1287/mnsc.1110.1403

Eigenraam, A. W., Eelen, J., van Lin, A., & Verlegh, P. W. (2018). A Consumer-based Taxonomy of Digital Customer Engagement Practices. *Journal of Interactive Marketing*, *44*, 102–121. https://doi.org/10.1016/j.intmar.2018.07.002

Elkington, J. (1998a). ACCOUNTING FOR THE TRIPLE BOTTOM LINE. *Measuring Business Excellence*, *2*(3), 18–22. https://doi.org/10.1108/eb025539

Elkington, J. (1998b). Partnerships fromcannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, *8*(1), 37–51. https://doi.org/10.1002/tqem.3310080106

Esmark, C. L., Noble, S. M., & Bell, J. E. (2016). Open versus selective customer loyalty programmes. *European Journal of Marketing*, *50*(5/6), 770–795. https://doi.org/10.1108/EJM-11-2014-0730

Gable, M., Fiorito, S. S., & Topol, M. T. (2008). An empirical analysis of the components of retailer customer loyalty programs. *International Journal of Retail & Distribution Management*, *36*(1), 32–49. https://doi.org/10.1108/09590550810846983

Gensler, S., Völckner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing Brands in the Social Media Environment. *Journal of Interactive Marketing*, *27*(4), 242–256. https://doi.org/10.1016/j.intmar.2013.09.004

Grohs, R., Wieser, V. E., & Pristach, M. (2020). Value cocreation at sport events. *European Sport Management Quarterly*, *20*(1), 69–87. https://doi.org/10.1080/16184742.2019.1702708

Habibi, M. R., Laroche, M., & Richard, M.-O. (2014). Brand communities based in social media: How unique are they? Evidence from two exemplary brand communities. *International Journal of Information Management*, *34*(2), 123–132. https://doi.org/10.1016/j.ijinfomgt.2013.11.010

Hammedi, W., Leclerq, T., & van Riel, A. C. (2017). The use of gamification mechanics to increase employee and user engagement in participative healthcare services. *Journal of Service Management*, *28*(4), 640–661. https://doi.org/10.1108/JOSM-04-2016-0116

He, Y., Chen, Q., Lee, R. P., Wang, Y., & Pohlmann, A. (2017). Consumers' Role Performance and Brand Identification: Evidence from a Survey and a Longitudinal Field Experiment. *Journal of Interactive Marketing*, *38*, 1–11. https://doi.org/10.1016/j.intmar.2016.11.001

Hofacker, C. F., Ruyter, K. de, Lurie, N. H., Manchanda, P., & Donaldson, J. (2016). Gamification and Mobile Marketing Effectiveness. *Journal of Interactive Marketing*, *34*, 25–36. https://doi.org/10.1016/j.intmar.2016.03.001

Hoffman, J. L., & Lowitt, E. M. (2008). A better way to design loyalty programs. *Strategy & Leadership*, *36*(4), 44–47. https://doi.org/10.1108/10878570810888777

Hollebeek, L. D., Das, K., & Shukla, Y. (2021). Game on! How gamified loyalty programs boost customer engagement value. *International Journal of Information Management*, *61*, 102308. https://doi.org/10.1016/j.ijinfomgt.2021.102308

Hsee, C. K., Yu, F., Zhang, J., & Zhang, Y. (2003). Medium Maximization. *Journal of Consumer Research*, *30*(1), 1–14. https://doi.org/10.1086/374702

Hwang, J., & Choi, L. (2020). Having fun while receiving rewards? Exploration of gamification in loyalty programs for consumer loyalty. *Journal of Business Research*, *106*, 365–376. https://doi.org/10.1016/j.jbusres.2019.01.031

Jang, H., Olfman, L., Ko, I., Koh, J., & Kim, K. (2008). The Influence of On-Line Brand Community Characteristics on Community Commitment and Brand Loyalty. *International Journal of Electronic Commerce*, *12*(3), 57–80. https://doi.org/10.2753/JEC1086-4415120304

Joyce, A., & Paquin, R. L. (2016). The triple layered business model canvas: A tool to design more sustainable business models. *Journal of Cleaner Production*, *135*, 1474–1486. https://doi.org/10.1016/j.jclepro.2016.06.067

Kim, J. J., Steinhoff, L., & Palmatier, R. W. (2021). An emerging theory of loyalty program dynamics. *Journal of the Academy of Marketing Science*, *49*(1), 71–95. https://doi.org/10.1007/s11747-020-00719-1

Kozinets, R. V. (2002). The Field behind the Screen: Using Netnography for Marketing Research in Online Communities. *Journal of Marketing Research*, *39*(1), 61–72. https://doi.org/10.1509/jmkr.39.1.61.18935

Kozinets, R. V. (2006). Click to Connect: Netnography and Tribal Advertising. *Journal of Advertising Research*, *46*(3), 279–288. https://doi.org/10.2501/S0021849906060338

Kozinets, R. V. (2012). Marketing Netnography: Prom/ot(Ulgat)ing a New Research Method. *Methodological Innovations Online*, *7*(1), 37–45. https://doi.org/10.4256/mio.2012.004

Lacey, R., & Sneath, J. Z. (2006). Customer loyalty programs: Are they fair to consumers? *Journal of Consumer Marketing*, *23*(7), 458–464. https://doi.org/10.1108/07363760610713000

Lamberton, C., & Stephen, A. T. (2016). A Thematic Exploration of Digital, Social Media, and Mobile Marketing: Research Evolution from 2000 to 2015 and an Agenda for Future Inquiry. *Journal of Marketing*, *80*(6), 146–172. https://doi.org/10.1509/jm.15.0415

Landis, J. R., & Koch, G. G. (1977). The Measurement of Observer Agreement for Categorical Data. *Biometrics*, *33*(1), 159. https://doi.org/10.2307/2529310

Lemon, K. N., & Wangenheim, F. v. (2009). The Reinforcing Effects of Loyalty Program Partnerships and Core Service Usage. *Journal of Service Research*, *11*(4), 357–370. https://doi.org/10.1177/1094670508330451

Lombardo, S., & Cabiddu, F. (2017). What's in it for me? Capital, value and co-creation practices. *Industrial Marketing Management*, *61*, 155–169. https://doi.org/10.1016/j.indmarman.2016.06.005

MacLean, L. M., Meyer, M., & Estable, A. (2004). Improving accuracy of transcripts in qualitative research. *Qualitative Health Research*, *14*(1), 113–123. https://doi.org/10.1177/1049732303259804

McCracken, G. (1988). *The Long Interview*. SAGE Publications, Inc. https://doi.org/10.4135/9781412986229

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2. ed.). SAGE.

Mulcahy, R. F., Russell-Bennett, R., Zainuddin, N., & Kuhn, K.-A. (2018). Designing gamified transformative and social marketing services. *Journal of Service Theory and Practice*, *28*(1), 26–51. https://doi.org/10.1108/JSTP-02-2017-0034

Nastasoiu, A., & Vandenbosch, M. (2019). Competing with loyalty: How to design successful customer loyalty reward programs. *Business Horizons*, *62*(2), 207–214. https://doi.org/10.1016/j.bushor.2018.11.002

Palmatier, R. W., Jarvis, C. B., Bechkoff, J. R., & Kardes, F. R. (2009). The Role of Customer Gratitude in Relationship Marketing. *Journal of Marketing*, *73*(5), 1–18. https://doi.org/10.1509/jmkg.73.5.1

Pasca, M. G., Renzi, M. F., Di Pietro, L., & Mugion, R. G. (2021). Gamification in tourism and hospitality research in the era of digital platforms: A systematic literature review. *Journal of Service Theory and Practice*, *31*(5), 691–737. https://doi.org/10.1108/JSTP-05-2020-0094

Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, *8*(3), 238–264. https://doi.org/10.1108/11766091111162070

Ramaswamy, V., & Gouillart, F. J. (2010). *The power of co-creation: Build it with them to boost growth, productivity, and profits*. Free Press.

Ramaswamy, V., & Ozcan, K. (2016). Brand value co-creation in a digitalized world: An integrative framework and research implications. *International Journal of Research in Marketing*, *33*(1), 93–106. https://doi.org/10.1016/j.ijresmar.2015.07.001

Reckwitz, A. (2002). Toward a Theory of Social Practices. *European Journal of Social Theory*, *5*(2), 243–263. https://doi.org/10.1177/13684310222225432

Sailer, M., Hense, J. U., Mayr, S. K., & Mandl, H. (2017). How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction. *Computers in Human Behavior*, *69*, 371–380. https://doi.org/10.1016/j.chb.2016.12.033

Schau, H. J., Muñiz, A. M., & Arnould, E. J. (2009). How Brand Community Practices Create Value. *Journal of Marketing*, *73*(5), 30–51. https://doi.org/10.1509/jmkg.73.5.30

Sigala, M. (2015). Applying Gamification and Assessing its Effectiveness in a Tourism Context : Behavioural and Psychological Outcomes of the TripAdvisor’s Gamification

Users. *Asia Pacific Journal of Information Systems*, *25*(1), 179–210. https://doi.org/10.14329/apjis.2015.25.1.179

Skålén, P., Pace, S., & Cova, B. (2015). Firm-brand community value co-creation as alignment of practices. *European Journal of Marketing*, *49*(3/4), 596–620. https://doi.org/10.1108/EJM-08-2013-0409

Spiggle, S. (1994). Analysis and Interpretation of Qualitative Data in Consumer Research. *Journal of Consumer Research*, *21*(3), 491. https://doi.org/10.1086/209413

Stegmann, P., Nagel, S., & Ströbel, T. (2021). The digital transformation of value co-creation: a scoping review towards an agenda for sport marketing research. *European Sport Management Quarterly*, 1–28. https://doi.org/10.1080/16184742.2021.1976241

Steinhoff, L., & Palmatier, R. W. (2016). Understanding loyalty program effectiveness: Managing target and bystander effects. *Journal of the Academy of Marketing Science*, *44*(1), 88–107. https://doi.org/10.1007/s11747-014-0405-6

Storbacka, K., Brodie, R. J., Böhmann, T., Maglio, P. P., & Nenonen, S. (2016). Actor engagement as a microfoundation for value co-creation. *Journal of Business Research*, *69*(8), 3008–3017. https://doi.org/10.1016/j.jbusres.2016.02.034

Tari Kasnakoglu, B. (2016). Antecedents and consequences of co-creation in credence-based service contexts. *The Service Industries Journal*, *36*(1-2), 1–20. https://doi.org/10.1080/02642069.2016.1138472

Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. SAGE.

Tobon, S., Ruiz-Alba, J. L., & García-Madariaga, J. (2020). Gamification and online consumer decisions: Is the game over? *Decision Support Systems*, *128*, 113167. https://doi.org/10.1016/j.dss.2019.113167

Tommasetti, A., Troisi, O., & Vesci, M. (2017). Measuring customer value co-creation behavior. *Journal of Service Theory and Practice*, *27*(5), 930–950. https://doi.org/10.1108/JSTP-10-2015-0215

Tong, S., Luo, X., & Xu, B. (2020). Personalized mobile marketing strategies. *Journal of the Academy of Marketing Science*, *48*(1), 64–78. https://doi.org/10.1007/s11747-019-00693-3

van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. *Journal of Service Research*, *13*(3), 253–266. https://doi.org/10.1177/1094670510375599

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, *68*(1), 1–17. https://doi.org/10.1509/jmkg.68.1.1.24036

Vargo, S. L., & Lusch, R. F. (2010). From Repeat Patronage to Value Co-creation in Service Ecosystems: A Transcending Conceptualization of Relationship. *Journal of Business Market Management*, *4*(4), 169–179. https://doi.org/10.1007/s12087-010-0046-0

Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, *44*(1), 5–23. https://doi.org/10.1007/s11747-015-0456-3

Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the Qualitative-Quantitative Divide: Guidelines for Conducting Mixed Methods Research in Information Systems. *MIS Quarterly*, *37*(1), 21–54. https://doi.org/10.25300/MISQ%2F2013/37.1.02

Wünderlich, N. V., Gustafsson, A., Hamari, J., Parvinen, P., & Haff, A. (2020). The great game of business: Advancing knowledge on gamification in business contexts. *Journal of Business Research*, *106*, 273–276. https://doi.org/10.1016/j.jbusres.2019.10.062

Xu, F., Buhalis, D., & Weber, J. (2017). Serious games and the gamification of tourism. *Tourism Management*, *60*, 244–256. https://doi.org/10.1016/j.tourman.2016.11.020

Yi, Y., & Jeon, H. (2003). Effects of Loyalty Programs on Value Perception, Program Loyalty, and Brand Loyalty. *Journal of the Academy of Marketing Science*, *31*(3), 229–240. https://doi.org/10.1177/0092070303031003002

Yin, R. K. (2014). *Case study research: Design and methods* (5. edition). SAGE.

3.1.10 Appendix

Coding Guide

For each used practice of Schau et al. (2009) there is one code. There are two additional new codes (appreciating, collaborating) due to the introduction of a new thematic category (community bonding & shaping). Also, there are three codes for firms' purposes to engage with customers via loyalty programs (economic, ecological, economic dimension). More than one code can apply to each interview section, so please add several codes accordingly, if needed.

Social Practices:

Social Networking practices focus on creating, enhancing and sustaining ties among brand community members.

- Governing: communicate behavioral expectations, what does adidas stand for; organizer informs and enforces rules among event participants; what are the rules and what does adidas expect from its members (e.g. run 10km or send us your feedback)

Impression Management practices have an external, outward focus on creating favorable impressions of the brand, brand enthusiasts, and brand community in the social universe beyond the brand community.

- Evangelizing: praising of something; activations that prompt members to share the opportunity with friends and their community or that prompt members to praise adidas for their ideas/actions/activations
- Justifying: people defend the time they invest in it, e.g. marketing benefits through challenge; everything related to the question: can members somehow justify the time investment (e.g. do good for the environment, collect points)?

Community Engagement practices reinforce members` escalating engagement with the brand community.

- Staking: differences in community, e.g., different member levels or different interests (e.g. football, outdoor)

Community bonding and shaping goes beyond community engagement and refers to how the community can increasingly manifest itself and develop further.

- Collaborating: everything where adidas works together with members or partners to generate added value
- Appreciating: activations that express adidas' appreciation of their loyal members and that do not necessarily result in a direct benefit for adidas (e.g. experience-related raffles that members appreciate), or things that adidas appreciates about their members (e.g. members share their ideas or opinions with adidas)

Brand Use practices are specifically related to improved or enhanced use of the focal brand.

- Grooming: sponsors use adiClub to integrate their brand in the communication for commercial purposes; it is used when business partners are involved in an activation and can thus advertise their own brand
- Customizing: personalized activations and offers for individual groups

Purposes:

- Social: anything that serves to build the community, support it or help local communities (e.g. community runs or support of local football clubs)
- Ecological: everything to do with sustainability, plastic avoidance, protection of endangered species, etc.
- Economic: everything that drives sales, increases product knowledge, etc.

3.2 Measuring the effects of engagement in online brand communities on sustainable brand perception along the triple bottom line (Research Paper 2)

Authors Frederic Dreher, University of Bayreuth, Germany

Prof. Dr. Tim Ströbel, University of Bayreuth, Germany

Published in: Dreher, F., & Ströbel, T. (2026). Measuring the effects of engagement in online brand communities on sustainable brand perception along the triple bottom line. *Social Responsibility Journal*, 22(6), 1273–1293.

https://doi.org/10.1108/SRJ-05-2025-0500

ABSTRACT

Purpose: This study investigates the extent to which customer engagement in online brand communities (OBCs) influences brand perception, focusing on its social, ecological, and economic dimension. The analysis centers on adidas' brand TERREX and is guided by the three P's of people, planet, and profit.

Design/methodology/approach: A covariance-based structural equation model was used measuring engagement through five different touchpoints of interaction occurring in the adiClub, the OBC of adidas. The model assesses how these touchpoints affect the sustainable perception of the brand.

Findings: The results indicate that customer engagement in the adiClub has a positive impact on sustainable brand perception of TERREX. Notably, customers who perceive the brand as environmentally focused are significantly more inclined to invest personal resources in understanding the brand's offerings. This deeper engagement enhances their perception of TERREX as superior to competitor brands in terms of product quality and functionality.

Originality: This study contributes to research and practice in the context of corporate social responsibility (CSR) and brand management as researchers and managers can obtain new insights into how to engage with customers in OBCs to shape a cohesive sustainable brand perception.

Keywords: *customer engagement; online brand communities; brand perception; corporate social responsibility; triple bottom line*

3.2.1 Introduction

Customer engagement describes how customers develop ongoing and interactive relationships with brands beyond single transactions (Brodie et al., 2011; Hollebeek, 2011). Customer engagement theory conceptualizes engagement as the cognitive, emotional, and behavioral investment customers make in brand-related interactions, emphasizing that engagement represents a long-term relational state rather than a short-term behavioral response (Hollebeek et al., 2019). Engagement reflects a sustained form of involvement that fosters customer satisfaction and loyalty (Bowden, 2009; Khamitov et al., 2019). Online brand communities (OBCs) have emerged as one of the most powerful platforms for customer engagement (Wirtz et al., 2013). OBCs can be defined as non-geographically bound communities formed around a structured set of social relationships among brand admirers (A. M. Muniz & O'Guinn, 2001). As OBCs facilitate engagement with both the brand and other community members, customers develop deep and long term bonds with the brand, leading to more favorable brand evaluations (Alvarado-Herrera et al., 2017; T. K. Huang et al., 2022). In turn, these strengthened relationships contribute to shaping brand perception (Brodie et al., 2013; Wirtz et al., 2013), which can be understood as the process of interpreting and integrating stimuli from experiences, interactions, and the brand's communicated values into a coherent overall impression (Aaker, 1997; Brunk & Boer, 2020).

As customers increasingly consider social and environmental factors in their evaluations, sustainability has become an integral part of corporate strategy, making customer engagement essential for fostering perceptions of socially and environmentally responsible branding (Currás-Pérez et al., 2018b). In this context, corporate social responsibility (CSR) aims to promote long-term societal, economic, and environmental well-being (Du et al., 2011). Recognizing that social responsibility has become an important facet of branding, companies are concerned about how their brands are perceived by their customers, and ever more often

CSR-related criteria are employed as a point of difference set against competitors, with brand managers seeking to position their brands as morally superior (Lee et al., 2017). However, customers often distrust CSR as self-serving (Brunk & Boer, 2020). To overcome the challenge of customer skepticism toward a brand's efforts, customer engagement can serve as a mechanism that involves customers closely in the brand's activities, thereby shaping how they perceive the brand and evaluate its actions.

The triple bottom line (TBL) framework, introduced by Elkington (1998b), offers a structured approach for capturing the effects of such engagement, emphasizing brand perception across economic, social, and environmental dimensions rather than solely through financial outcomes. This multidimensional approach is particularly important because customers are more likely to support and purchase from brands that demonstrate a genuine commitment to sustainability, making a balanced perception across TBL dimensions critical for fostering brand trust, loyalty, and long-term success (Akbari et al., 2019; Chan et al., 2024; Rodrigues & Borges, 2015).

However, research to date lacks insights into the effects of engagement in OBCs on customers' brand perception along the social, economic, and ecological dimension. This is a significant research gap that must be addressed. Only if engagement in OBCs leads to a change in customers' personal meaning regarding the brand's economic, social, and ecological efforts will firms benefit from a positively altered brand perception, resulting in a healthy and successful business (Du et al., 2011; Rodrigues & Borges, 2015).

Therefore, the current study contributes to research by providing insights from the adiClub, which is an OBC of adidas: (1) we develop a research model to measure the extent to which engagement within the OBC adiClub affects social, economic, and ecological brand perception, and (2) we measure the extent to which social and ecological brand perception have an effect on economic brand perception. We seek to answer the following research questions:

1) *To what extent does engagement within an OBC have a positive effect on brand perception along the three dimensions of TBL?*
2) *To what extent do social and ecological brand perception have positive effects on economic brand perception?*

3.2.2 Theoretical background

3.2.2.1 Customer engagement theory

Customer engagement theory provides the conceptual grounding for understanding how customers interact with brands beyond transactional exchanges. Engagement is commonly defined as a customer's cognitive investment reflected in focused attention and brand-related absorption, emotional investment expressed through enthusiasm, enjoyment, and inspiration, and behavioral investment demonstrated by the energy, effort, and time devoted to brand interactions (Brodie et al., 2011; Hollebeek, 2011).

Hollebeek et al. (2019) describe engagement as a dynamic psychological state that evolves through iterative customer–brand interactions, highlighting its multidimensional and context-dependent nature. This view positions customer engagement as a central mechanism for value co-creation, relational development, and sustained brand–customer connection over time. Interactions may include co-developing, advocacy, or feedback behaviors, reflecting varying degrees of involvement and relational intensity.

Importantly, engagement unfolds within a networked environment, where customers' individual and collective experiences continually reshape the meaning and strength of their relationships with the brand (Brodie et al., 2013). In digital contexts such as OBCs, these relationships become visible and measurable through customers' participatory behaviors in the form of sharing experiences, exchanging knowledge, or co-developing (Jaakkola & Alexander, 2014b).

This study therefore employs customer engagement theory as its overarching theoretical foundation, as it provides a robust framework for explaining how customers' ongoing cognitive, emotional, and behavioral investments shape their perceptions of the brand. The theory's relational and co-creative focus makes it particularly suitable for analyzing engagement processes in OBCs, where interactions are continuous, reciprocal, and multidimensional.

3.2.2.2 Customer engagement in OBCs

Previous research has recognized the importance of investigating customer–brand relationships (Tsai et al., 2012), with engagement referring to customers' active participation and emotional connection with a brand or service (Hollebeek et al., 2019). Nowadays, many major brands operate OBCs, which enable customers to connect with a brand in real time and share their brand-related experiences more easily and frequently (Alonso-Dos-Santos et al., 2018).

For example, OBC members may participate in co-development of a brand or its products, provide feedback by writing reviews or sharing usage experiences, enjoy social activities, take part in raffles, and benefit from member exclusives and early access (Hennig-Thurau et al., 2004; Jaakkola & Alexander, 2014b; Jung et al., 2020; Madupu & Cooley, 2010; Ramaswamy & Ozcan, 2016). Through these interaction possibilities with the brand and other community members, customers re-signify and interpret brand stimuli based on their life contexts, desired social goals, identity projects, and objectives (Brodie et al., 2011; Wirtz et al., 2013).

Customer engagement theory helps explain these phenomena by framing OBCs as relational and dynamic environments (Brodie et al., 2013). Engagement in OBCs involves both brand-directed and peer-directed interactions that enhance learning, trust, and identification. Members' experiences are shaped by both the structural features of the community and the quality of interactions among participants (Hollebeek et al., 2019).

3.2.2.3 The relation between customer engagement and brand perception

From the theoretical standpoint of customer engagement, brand perception evolves as a psychological outcome of customers' experiential and relational processes (Hollebeek et al., 2019). Customers who experience higher cognitive immersion and emotional attachment during brand interactions tend to form stronger brand associations and trust (Harmeling et al., 2017). This alignment between engagement and brand perception enhances customers' evaluations across functional, symbolic, and ethical dimensions (Vivek et al., 2012). Engaged customers tend to develop deeper relationships with brands, which result in more favorable evaluations and stronger loyalty bonds (Goyal & Verma, 2024). Consequently, enabling manifold interactions in online brand communities among members and with the brand itself becomes a key mechanism for strengthening brand perception (T. K. Huang et al., 2022; Wirtz et al., 2013). When customers actively participate in shaping brand narratives, e.g., by generating user content or by providing feedback, they perceive the brand as more authentic (Eigenraam et al., 2021). Accordingly, brand managers must set up OBCs in a way that allows members to get actively involved in the brand's activities as positive experiences gained from these interactions can serve to strengthen the customer's perception of the brand (Algesheimer et al., 2005). This is particularly relevant as many companies are endeavoring to position their brands as committed to CSR (Akbari et al., 2019; Kumar et al., 2024).

3.2.2.4 Customer engagement and brand perception in the context of sustainability

CSR refers to brands' voluntary integration of social and environmental concerns into their business operations and stakeholder interactions (Du et al., 2011). Over the past decades, CSR has evolved from peripheral philanthropy to a strategic imperative that contributes to long-term brand competitiveness and stakeholder trust (Chan et al., 2024). Hence, successful brand positioning related to CSR has become an important differentiation strategy for brands (Akbari et al., 2019). CSR is closely related to the triple bottom line (TBL) framework introduced by

Elkington (1998b), as both emphasize the importance for firms to address economic, social, and ecological responsibilities for long-term success (Du et al., 2011). Economic performance reflects profitability and long-term value creation, social performance addresses equity, community welfare, and ethical conduct, and ecological performance concerns environmental stewardship and resource efficiency (Milne & Gray, 2013).

Since a positive sustainable brand perception can increase customers' purchase intention towards green products and help brands to sustain differentiation and competitiveness even in case of market disruptions (Y.-C. Huang et al., 2014), it is critical to better understand how customer engagement in OBCs affects customers' brand perception along the three dimensions of TBL (Chang & Jai, 2015). Accordingly, this study refers to sustainable brand perception as the interpretation and integration of stimuli into cohesive and meaningful impressions (Aaker, 1997; Brunk & Boer, 2020) along the economic, social and environmental dimensions (Elkington, 1998).

3.2.3 Development of hypotheses

Due to the evidently good fit of the sports industry for investigating interactions in OBCs owing to the high identification potential with sports brands, we examined engagement in such an online community. We built our study on the adiClub, which is an OBC of adidas and enables manifold brand–customer and customer–customer interaction potential. Specifically, we measure engagement across five different touchpoints of interactions between the brand and its members: workshops, feedback, challenges, raffles, and member exclusives. These are the main activities occurring on the adiClub, which are in line with interactions identified by previous research (Hennig-Thurau et al., 2004; Jaakkola & Alexander, 2014b; Jung et al., 2020; Madupu & Cooley, 2010).

Workshops represent participatory, knowledge-intensive activities that stimulate learning and co-development (Füller, 2010; Piller et al., 2005; Sawhney et al., 2005). Feedback captures

customers' cognitive and evaluative engagement, providing input that signals interest and trust (Carlson et al., 2018; Eigenraam et al., 2018a). Challenges represent goal-oriented and competitive interactions that strengthen members' identification and community belonging (Falchi et al., 2025; Schaarschmidt & Dose, 2023). Raffles embody hedonic and gamified participation, enhancing excitement and positive affect toward the brand (Jung et al., 2020; Shen & Ming, 2022). Finally, member exclusives create a sense of privilege and symbolic association that reinforces perceived relational closeness and loyalty (Haverila et al., 2022; Wirtz et al., 2013). Together, these touchpoints capture both social and individual drivers of customer engagement in OBCs. We consciously decided to measure engagement along these five distinct touchpoints because we seek to examine to what extent the effect on sustainable brand perception varies by touchpoint. This approach aims to equip brand managers with the insights needed to make more targeted decisions based on their desired brand positioning.

Customer engagement plays a critical role in the social dimension of brand perception because it facilitates interpersonal connections, mutual recognition, and community building (Brodie et al., 2013; Vivek et al., 2012). We define the social dimension as customers' impressions of the brand's socio-cultural actions and goals, including fostering community relations, helping disadvantaged groups, and promoting diversity and inclusion (Currás-Pérez et al., 2018b). As branding processes become more dynamic and interactive (Osei-Frimpong & McLean, 2018), the social dimension of brand perception increases in relevance. Amongst others, it includes relationships existing among customers and between the brand and its customers in brand communities (Le Hau, 2019).

Each touchpoint contributes uniquely to this process. Workshops promote social bonding through shared learning, feedback signals that the brand values its community's input, challenges foster teamwork and shared purpose, raffles build collective excitement, and exclusives cultivate belongingness and identity (Currás-Pérez et al., 2018b; Hollebeek et al.,

2019; Wirtz et al., 2013). Accordingly, engagement in OBCs is expected to strengthen customers' perception of a brand's social responsibility and its commitment to community relations. This leads to the following hypotheses:

H1. Engaging customers in OBCs positively affects customers' social brand perception (SOC).

H1a. Participating in joint workshops positively affects SOC.

H1b. Enabling community members to give feedback positively affects SOC.

H1c. Engaging in challenges with others positively affects SOC.

H1d. Offering raffles in OBCs positively affects SOC.

H1e. Member exclusives and pre-sales positively affect SOC.

Additionally, brands are increasingly making environmental objectives part of their strategy and daily operations (Kumar et al., 2024). By engaging with customers on the topic of sustainability, customers may change their perception about the brand's ecological efforts, which can lead to a sustainable competitive advantage (Du et al., 2011). The ecological dimension of brand perception captures customers' evaluations of a brand's environmental activities and commitments in terms of waste management, eco-friendly products, and the reduction of plastic usage (Currás-Pérez et al., 2018b; Y.-C. Huang et al., 2014).

Engagement mechanisms in OBCs enable customers to experience these activities and commitments directly and lead to a sense of belongingness. Workshops and feedback sessions provide touchpoints to exchange ideas about sustainable products or eco-friendly packaging (Kumar et al., 2024; Ogbeibu et al., 2021). Challenges, such as fitness or recycling activities, allow customers to align personal behavior with brand-led environmental values, reinforcing authenticity (Eigenraam et al., 2021). Raffles that feature green prizes and exclusives that offer access to sustainable products strengthen associations between the brand and its ecological objectives (Alvarado-Herrera et al., 2017; Jung et al., 2020). Consequently, we expect that

higher engagement in these OBC activities will enhance customers' ecological brand perception, resulting in the following hypotheses:

H2. Engaging customers in OBCs positively affects customers' ecological brand perception (ECOL).

H2a. Participating in joint workshops positively affects ECOL.

H2b. Enabling community members to give feedback positively affects ECOL.

H2c. Engaging in challenges with others positively affects ECOL.

H2d. Offering raffles in OBCs positively affects ECOL.

H2e. Member exclusives and pre-sales positively affect ECOL.

The economic dimension of brand perception reflects customers' impressions of a brand's efforts to produce high-quality goods and services that society desires and address customers' related needs (Alvarado-Herrera et al., 2017; Phillips Melancon et al., 2010). Customer engagement contributes to this perception by signaling brand competence and responsiveness (Eigenraam et al., 2021; Hollebeek et al., 2019; F. Muniz & Guzmán, 2023). Workshops and feedback activities create exchange and transparency on product quality and production standards (Sansome et al., 2025; Yang & Battocchio, 2021). Challenges evoke goal achievement and performance orientation (Schaarschmidt & Dose, 2023), while raffles maintain customer interest and repurchase intention (Shen & Ming, 2022). Exclusives reinforce value perception through privileged access and early experiences, which strengthen brand trust (X. Wang et al., 2024). Together, these activities are expected to lead customers to perceive the brand as reliable, innovative, and economically competitive. Consequently, we derive the following hypotheses:

H3. Engaging customers in OBCs positively affects customers' economic brand perception (ECON).

H3a. Participating in joint workshops positively affects ECON.

H3b. Enabling community members to give feedback positively affects ECON.

H3c. Engaging in challenges with others positively affects ECON.

H3d. Offering raffles in OBCs positively affects ECON.

H3e. Member exclusives and pre-sales positively affect ECON.

Finally, we introduce two additional hypotheses to understand whether the social and ecological dimensions of brand perception positively affect economic brand perception. This decision was based on previous research that found evidence of the positive effect of corporate social responsibility on a firm's economic performance (Du et al., 2011; Okafor et al., 2021). Related to this, prior studies have provided findings showing the positive effect of firms' social and environmental activities on their reputation and competitive advantage (Y. Wang & Berens, 2015; Xie et al., 2019). These results suggest that both social and ecological brand perception can drive economic brand perception, which is of practical relevance as brands will invest more time and resources into engaging with customers in OBCs if they know that it will eventually lead to a competitive advantage through increased economic brand perception. Accordingly, we introduce the following hypotheses:

H4. SOC positively affects ECON.

H5. ECOL positively affects ECON.

To summarize, the five touchpoints represent brand-initiated engagement opportunities and therefore function as the exogenous variables in the model. Each of these activities requires a form of cognitive, emotional, or behavioral investment from customers, positioning them as antecedent drivers of downstream brand evaluations in accordance with customer engagement theory. The three dimensions of sustainable brand perception serve as the endogenous variables, as they capture customers' evaluative responses that arise after engaging with the brand in the OBC. Consistent with CSR and TBL reasoning, social and ecological brand perception are modeled as antecedents of economic brand perception, reflecting evidence that

customers reward brands perceived as socially responsible and environmentally committed with stronger economic evaluations. The resulting conceptual model is illustrated in figure 3.2-1 below.

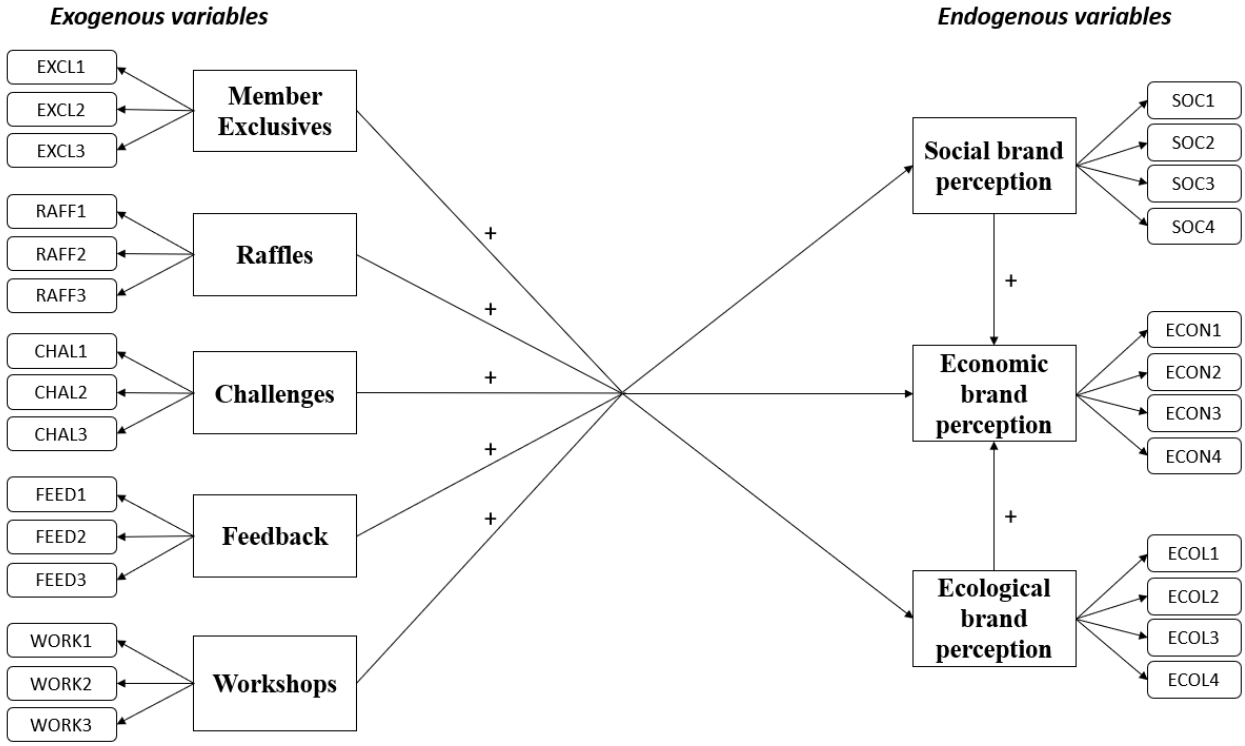


Figure 3.2-1: Conceptual model of engagement types and their effects on sustainable brand perception

Note. Work = Workshop; Feed = Feedback; Chall = Challenges; Raff = Raffles; Excl = Member exclusives; SOC = Social brand perception; ECOL = Ecological brand perception; ECON = Economic brand perception.

3.2.4 Methodology

3.2.4.1 The adiClub

The adiClub is an OBC that was first launched in the US in 2018 and currently covers nine markets. As adidas is one of the most well-known retailer brands worldwide, millions of members use adiClub to engage in local and global sports topics and interact with the brand and other members through the aforementioned five key activity types. adiClub is a non-geographically bound, customer-centric community where customer experience is key to the meaningfulness of the community and crucial relationships exist. This includes those between the customers and brand, customers and product, and fellow community (Brodie et al., 2017;

Muniz & O'Guinn, 2001). We focused our analysis on adidas' brand TERREX because the latter is building its strategy around the three P's of people, planet and profit. Accordingly, adidas TERREX uses the adiClub to engage with its members to reach its goals related to CSR, which makes it an ideal case study to examine the extent to which engagement affects sustainable brand perception within an OBC.

3.2.4.2 Data collection and descriptive statistics

To analyze the constructs of our research model and their relationships, we developed an online questionnaire using Qualtrics. Prior to utilizing the questionnaire in the main study, a pre-test was conducted with 20 proficient, academic participants to evaluate the structure, clarity of wording, spelling, and appropriateness of the measurement items. After making minor adjustments, the final questionnaire consisted of three sections. The first part collected information about the participants' sports activities and their engagement with the digital adidas platforms through five introductory questions. Next, the constructs for community workshops (WORK), giving feedback (FEED), community challenges (CHAL), raffles (RAFF), and member exclusives and pre-sales (EXCL) were presented to measure engagement in the adiClub. The items related to the five constructs were derived from previous research on engagement in OBCs (Algesheimer et al., 2005; Baldus et al., 2015; Hammedi et al., 2015; Lynn & Harris, 1997; Mowen et al., 2009; Tian et al., 2001; Tsai et al., 2012). Subsequently, items measuring the social (SOC), ecological (ECOL), and economic (ECON) dimensions of brand perception were included in the questionnaire. All three dimensions were taken from previous exploratory findings (Carlini & Grace, 2021; Le Hau, 2019; Phillips Melancon et al., 2010; Zhou et al., 2021) and slightly modified to fit our purpose (see table 3.2-4). All constructs related to engagement and brand perception were measured using several items on a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). Finally, the last section

addressed questions related to demographics such as age, gender, place of residence, and education.

As aforementioned, we deliberately restricted data collection to customers of adidas TERREX, which is the outdoor brand of adidas. TERREX takes considerable efforts to engage with their customers, get their feedback, educate them on pro-environmental behavior and offer them high-quality, sustainable products. Hence, the brand is well-suited for our research context. Data were collected in Germany, the US, and the UK by posting the questionnaire on Facebook online communities of adidas TERREX and distributing it via e-mail to members of the adiClub who have indicated their interest in TERREX and outdoor sports. We chose to rely on different sources of data collection to ensure a diverse group of people interacting with TERREX and with each other through the adiClub. The collection period was from August 28, 2022 to October 16, 2022, and a total of 201 responses were recorded. Thirty four (i.e., 16.9%) incomplete responses were removed and 167 responses were used for further analysis.

Data preparation and preliminary analyses were conducted in IBM SPSS Statistics, while hypothesis testing was performed using AMOS. The study is theory-informed and prediction-oriented, drawing on customer engagement theory to examine how different touchpoints influence sustainable brand perception across the TBL. Using AMOS for covariance-based structural equation modeling (CB-SEM) allows rigorous testing of these theoretically grounded relationships, as it simultaneously estimates and validates measurement and structural models (Byrne, 2016; Kline, 2016). CB-SEM estimates parameters to reproduce the observed covariance matrix as closely as possible, enabling robust evaluation of hypothesized causal relationships (Kline, 2016).

The sample size (N = 167) exceeded the recommended threshold of at least five observations per estimated parameter (Bentler & Chouh, 1987). In the sample, 50.3% were male participants (n = 84), indicating an even distribution between males and females. Of the

participants, 31.1 % (n = 52) were aged 30–40 years, with only slightly fewer participants aged 40+ years (n = 48, 28.7%) and 22–30 years (n = 47, 28.1%). Most participants lived in Germany (n = 73, 43.7%), followed by the US (n = 63, 37.7%). Furthermore, the highest education level of most participants was a master's degree (n = 70, 41.9%), and 74.2% (n = 124) had at least one university degree. Thus, our sample mainly comprised well-educated participants. In terms of member engagement with the adiClub, 67.6% (n = 113) of the participants were either Level 3 (n = 59, 35.3%) or Level 4 (n = 54, 32.3%) members. Levels range from 1 (lowest) to 4 (highest) and indicate how many members interact with the brand and with each other on the adiClub through raffles, member exclusives, feedback provision, challenges, and workshops. Of the participants, 48.5 % (n = 81) had been members for more than one year, and the majority (n = 105, 62.8%) spent up to 30 min per week engaged in the adiClub. Furthermore, most participants (n = 101, 60.4%) spent up to 60 min per week on other digital platforms of adidas (e.g., adidas Running) (see table 3.2-5).

3.2.5 Results

3.2.5.1 Measurement model evaluation

Data adequacy and construct validity were first examined to ensure suitability for structural equation modeling. The Kaiser–Meyer–Olkin (KMO) measure showed a value of .874, which is satisfactory (Cerny & Kaiser, 1977). In addition, Bartlett's test of sphericity was significant ($p < .001$), indicating that the data were appropriate for factor analysis.

The construct reliability and validity of the model were then assessed by calculating the composite reliability (CR) and average variance extracted (AVE). All CR values exceeded .7 and AVE values were at or above .5, indicating satisfactory convergent validity (Fornell & Larcker, 1981). Cronbach's alpha ranged from .811 to .931, confirming internal consistency reliability (Cronbach, 1951). Table 3.2-1 summarizes the results.

Latent variable	Items	Mean (SD)	Cronbach's α	CR	AVE
WORK	3	5.796 (1.533)	.930	.85	.66
FEED	3	5.148 (1.573)	.811	.82	.61
CHAL	3	5.473 (1.386)	.887	.84	.65
RAFF	3	6.020 (1.120)	.833	.87	.69
EXCL	3	5.086 (1.559)	.902	.89	.73
SOC	4	5.874 (1.357)	.912	.85	.50
ECOL	4	6.241 (1.018)	.931	.90	.57
ECON	4	5.630 (1.172)	.908	.88	.54

Table 3.2-1: Assessment of convergent validity and internal consistency

Furthermore, all standardized indicator loadings exceeded the recommended threshold of .7 (see table 3.2-6), demonstrating that each indicator adequately represented its respective construct (Hair, Hult, et al., 2016; Kline, 2016). To assess discriminant validity, the Fornell-Larcker criterion (Fornell & Larcker, 1981), and the heterotrait–monotrait ratio (HTMT) (Henseler et al., 2015) were calculated and analyzed. Discriminant validity was supported, as the square root of the AVE for each construct exceeded its correlations with other constructs (see table 3.2-7). Furthermore, all HTMT values were below the conservative threshold of .85, confirming discriminant validity across constructs (Henseler et al., 2015). Hence, construct validity, discriminant validity, and reliability were all supported. Table 3.2-2 presents the HTMT values.

	WORK	*FEED*	*CHAL*	*RAFF*	*EXCL*	*SOC*	*ECOL*	*ECON*
WORK	1							
FEED	.533	1						
CHAL	.575	.466	1					
RAFF	.317	.350	.324	1				
EXCL	.168	.241	.394	.382	1			
SOC	.244	.273	.357	.268	.536	1		
ECOL	.487	.344	.332	.239	.168	.359	1	
ECON	.636	.643	.595	.326	.137	.308	.442	1

Table 3.2-2: Assessment of discriminant validity

3.2.5.2 Structural model evaluation

We assessed model fit by checking the minimum discrepancy divided by its degrees of freedom (CMIN/DF). The fit was acceptable with a model value of 1.925 (Kline, 2016). Furthermore, the comparative fit index (CFI) of the model was .92, once again indicating an acceptable fit (Fan et al., 1999; Hu & Bentler, 1999). Looking at the variance inflation factors (VIFs), the values were rather low, ranging from 1.222 to 1.582, which is below the conservative threshold of 3 for collinearity issues (Hair, Hult, et al., 2016) and well below the threshold of 3.3 for common method bias (Kock, 2015). As the research design bears the inherent risk of common method bias, Harman's single-factor test (Harman, 1967) was additionally conducted. The result is extracting 34.612 percent of the total variance, which is far less than 50 percent (Organ & Greene, 1981; Podsakoff et al., 2003). Hence, it can be assumed that common method bias was not a threat in the current data set. Finally, R^2 as a measure of explanatory modeling efforts, was checked to shed light on the impact of customer engagement in OBCs on sustainable brand perception (Shmueli et al., 2016). R^2 indicates the proportion of variance in a dependent construct that can be explained by its independent predictors. In the present study, R^2 values of 0.244, 0.419, and 0.570 for ECO, ECON, and SOC, respectively, suggest the in-sample predictive power ranges from weak to moderate (Hair et al., 2019; Rigdon, 2012). In behavioral and engagement research, where multiple factors influence outcomes and substantial correlation is rarely achievable, researchers have recommended that R^2 values exceeding 0.1 can be acceptable (Hair, Sarstedt, et al., 2016).

After confirming that all measures worked correctly, the hypotheses were tested using a bootstrapping procedure that included 10,000 subsamples. Table 3.2-3 displays the results of the derived path coefficients and 95% confidence intervals.

Hypothesis			Path coefficients	Confidence intervals (bias-corrected, 95%)		p-value
				Lower	Upper	
H1a WORK	→	SOC	.258	.043	.491	.020
H1b FEED	→	SOC	.292	.112	.555	.001
H1c CHAL	→	SOC	.275	.041	.554	.018
H1d RAFF	→	SOC	.093	-.143	.329	.389
H1e EXCL	→	SOC	-.103	-.245	.018	.096
H2a WORK	→	ECOL	.245	.094	.402	.004
H2b FEED	→	ECOL	.031	-.091	.187	.621
H2c CHAL	→	ECOL	.044	-.106	.210	.523
H2d RAFF	→	ECOL	.060	-.117	.257	.512
H2e EXCL	→	ECOL	.025	-.101	.158	.721
H3a WORK	→	ECON	-.096	-.289	.081	.271
H3b FEED	→	ECON	-.017	-.215	.129	.752
H3c CHAL	→	ECON	.018	-.207	.248	.772
H3d RAFF	→	ECON	.032	-.219	.269	.734
H3e EXCL	→	ECON	.312	.176	.466	.000
H4 SOC	→	ECON	.158	-.098	.420	.219
H5 ECOL	→	ECON	.399	.176	.647	.001

Table 3.2-3: Hypotheses testing

Thus, H1a, H1b, H1c, H2a, H3e and H5 were supported. First, WORK, FEED, and CHAL all had a significant positive effect on SOC in the range of .258 to .292. Particularly noteworthy, the only latent variable with a significant effect on ECOL was WORK. With a positive effect of .245 and $p = .004$, we can assume that members who actively participate in *workshops* develop a strong sense of connection with the brand and therefore perceive it favorably in terms of environmental efforts. Furthermore, EXCL had a strong positive effect on ECON of .312 at $p < .000$. This is in line with expectations as engagement in member exclusives and pre-sales focuses on generating favorable product-related impressions of the brand. Accordingly, these

are adequate means of promoting the brand by offering special, high-quality products. Conversely, EXCL showed a negative effect of -.103 on SOC, implying that an excessively strong focus on generating favorable economic impressions of the brand may negatively impact how the brand is perceived socially. However, the related hypothesis, H2a, was only significant at p <= .1. Finally, ECOL showed a significant positive effect of .399 on ECON, indicating that a brand that is perceived as environmentally friendly is also believed to provide better products and services. No evidence was found for the remaining hypotheses.

3.2.6 Discussion

3.2.6.1 Theoretical contributions

Using adiClub as a case, this study examined the impact of customer engagement in OBCs on sustainable brand perception. Accordingly, this study contributes to research in the following ways. First, it introduces a novel approach to measuring customer engagement across five distinct touchpoints within OBCs. By distinguishing among workshops, feedback, challenges, raffles, and exclusives, this study enables a more granular understanding of how these touchpoints contribute to CSR-related brand outcomes. The operationalization shows that different touchpoints yield different perceptual outcomes, reflecting the complexity and richness of engagement in digital brand environments.

Second, it extends the understanding of how OBCs can function as strategic platforms in the context of CSR. While engagement in brand communities has been traditionally studied in the context of brand loyalty and emotional attachment (T. K. Huang et al., 2022), this study proposes that OBCs can also serve as effective vehicles for altering customers' sustainable brand perception by fostering and facilitating customer engagement. Therefore, this study contributes to the growing body of research on digital transformation related to sustainability (Guandalini, 2022).

Third, our findings confirm that differentiating brand perception into social, ecological, and economic dimensions is a valuable contribution to research. This three-dimensional approach resonates with the TBL framework, which advocates that brands must create value not just economically but also socially and environmentally (Elkington, 1998b). The three dimensions must be examined separately as individual constructs. Treating brand perception as a single, generalized construct conflicts with the more dynamic nature of branding processes, and the multifaceted responsibilities brands carry under CSR (Chan et al., 2024). This theoretical contribution is particularly important as brands increasingly recognize the role of social responsibility in strengthening customer relationships and enhancing brand equity (Akbari et al., 2019; Brunk & Boer, 2020).

Fourth, this study bridges the gap between engagement and CSR by showing that engagement activities can influence customers' sustainable brand perception. This offers new insights into how different touchpoints can foster deeper connections with the brand and enhance distinct dimensions of social, ecological, and economic brand perception. Hence, this contribution adds to the theoretical understanding of how engagement in OBCs and CSR are intertwined (Kumar et al., 2024).

Fifth and finally, we particularly found that workshops, as deeper bonding interactions, positively influence ecological brand perception, which in turn significantly enhances economic brand perception. This chain of influence underlines how brand activities can simultaneously fulfill environmental responsibilities while boosting economic value creation, aligning with the TBL logic (Rodrigues & Borges, 2015).

3.2.6.2 Managerial implications

The results of this study are valuable for brand managers as they examine which actions translate into a favorable sustainable brand perception. First, *workshops* enhance customers' social and ecological brand perception. This suggests that *workshops* foster deeper engagement

and allow for in-depth exploration of ecological concepts, thereby facilitating a better understanding and integration of brand-related sustainability messages. Workshop activities can range from sharing insights on how recycled products are made to jointly developing ideas on how to improve the community experience. In the case of adidas TERREX, brand managers are already taking efforts to organize physical *workshops* on a regular basis, e.g. TERREX Thursdays in the Munich TERREX store. However, while *workshops* should always remain interactive, there are possibilities to roll them out on a larger scale. For example, adidas TERREX could focus on organizing *workshops* more frequently, in more locations or in a digital environment. By doing so, adidas TERREX would deepen the community's understanding of its CSR efforts, thereby strengthening its social and ecological legitimacy. Additionally, the strong feeling of togetherness engendered through these activities leads to high identification with the brand and encourages brand members to trust its positive intentions.

Second, the positive effect of *feedback provision* on social brand perception can be explained by the brand conveying the message that it cares about the opinions of its brand members, resulting in members feeling more connected to the brand. Engagement through feedback aligns with CSR principles of stakeholder inclusivity, transparency, and ethical governance. While adidas TERREX already proactively asks for member feedback on previous purchases or community developments, e.g., the name change of the community from Creator's Club to adiClub, the results of this study show that focusing even more on *feedback provision* would allow adidas to further enhance customers' social brand perception. For example, adidas could host interactive online feedback sessions where community members can share and discuss their ideas on new products and services.

Third, *challenges* that bring members together lead to members' perception that the brand makes efforts to enable social gatherings and promote mutual exchanges between the brand and other members. One example are the regular running challenges of adidas where

community members can run for a good cause, share their success stories with other members on social media and cheer for each other. adidas TERREX could further develop its challenges by allowing members to participate in teams and compete with other teams, thereby further strengthening the feeling of togetherness. This reinforces the social dimension of CSR, fostering community building and collective engagement.

Fourth, *challenges* had no statistically significant effect on ecological brand perception although adidas TERREX is regularly organizing running challenges with an ecological purpose, e.g., Run for the Oceans to collect plastic waste or Run Wild to protect endangered species. One possible explanation could be that participants may engage primarily to meet and compete with others or for personal fitness goals rather than to deepen their understanding of the brand's ecological efforts. This highlights that CSR initiatives must be designed in ways that go beyond surface-level participation to truly embed environmental education and awareness.

Fifth, our results show that economic brand perception can be stimulated by offering customers access to *pre-sales* of new (limited) products or by developing special *exclusive products* available only to members or certain member levels. For example, adidas TERREX is regularly releasing limited editions of their most popular hiking shoe that are only available for sale to members of the adiClub. It is worth emphasizing that *member exclusives and pre-sales* was the only touchpoint that had a positive and significant effect on economic brand perception. Workshops, raffles, challenges and feedback mechanisms may not necessarily be product-related or translate into tangible benefits that enhance economic brand perception. Instead, they may primarily appeal to community members seeking entertainment, social exchange, or gamified experiences.

Sixth, our findings revealed that brands can also enhance their customers' economic brand perception by offering activities that positively affect ecological brand perception. While

members exclusives and pre-sales is the only direct path to enhance economic brand perception, firms can also leverage *workshops* to achieve a favorable ecological brand perception. Based on our results, ecological brand perception will lead customers to positively alternate their economic brand perception, while social brand perception showed no statistically significant effect on economic brand perception. This finding could be explained by customers believing that brands prioritizing sustainability also make economically sound decisions, such as investments in innovations to develop environmentally friendly, high quality products and processes. On the other hand, social brand perception pertains to a brand's ethical practices and community engagement efforts. While these aspects can enhance brand reputation and loyalty (T. K. Huang et al., 2022), they may not directly translate into perceptions of economic performance. Community members may appreciate these efforts for their ethical value but may not attribute them to enhancing economic brand perception.

Seventh and finally, *raffles* had no statistically significant effect on sustainable brand perception. This implies that practitioners should not rely on raffles when seeking to enhance members' sustainable brand perception. A possible explanation could be that sustainable brand perception encompasses multidimensional aspects that may not be fully captured by short-term engagement strategies such as raffles. It requires comprehensive learning experiences that go beyond incentivized activities. Consequently, while raffles are widely used as a motivational tool, they might be insufficient for advancing the deeper CSR narratives that underpin long-term brand sustainability. Therefore, their limited impact on enhancing sustainable brand perception warrants a critical evaluation of their role within broader engagement strategies.

3.2.6.3 Limitations and future research

Our study had several limitations that must be addressed in future research. First, although we are confident that the constructs were robust, future studies should validate our item scales. Second, we derived findings using the adidas adiClub as the research object. We deliberately

made this decision as the sports industry serves as an ideal setting due to the strong feelings and emotional bonds people have with sports brands. Nevertheless, we encourage future research to confirm our findings by investigating other contexts and industries to draw a generalized picture. Third, most participants in this study were from Germany and the US. Since brand perception might vary across countries owing to cultural differences, e.g., resulting in lower interest in a brand's ecological efforts, studies should be conducted in other nations to establish generalizability.

3.2.7 References

Aaker, J. L. (1997). Dimensions of Brand Personality. *Journal of Marketing Research*, *34*(3), 347–356. https://doi.org/10.1177/002224379703400304

Akbari, M., Mehrali, M., SeyyedAmiri, N., Rezaei, N., & Pourjam, A. (2019). Corporate social responsibility, customer loyalty and brand positioning. *Social Responsibility Journal*, *16*(5), 671–689. https://doi.org/10.1108/SRJ-01-2019-0008

Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The Social Influence of Brand Community: Evidence from European Car Clubs. *Journal of Marketing*, *69*(3), 19–34. https://doi.org/10.1509/jmkg.69.3.19.66363

Alonso-Dos-Santos, M., Rejón Guardia, F., Pérez Campos, C., Calabuig-Moreno, F., & Ko, Y. J. (2018). Engagement in sports virtual brand communities. *Journal of Business Research*, *89*, 273–279. https://doi.org/10.1016/j.jbusres.2017.12.053

Alvarado-Herrera, A., Bigne, E., Aldas-Manzano, J., & Curras-Perez, R. (2017). A Scale for Measuring Consumer Perceptions of Corporate Social Responsibility Following the Sustainable Development Paradigm. *Journal of Business Ethics*, *140*(2), 243–262. https://doi.org/10.1007/s10551-015-2654-9

Arnould, E. J. (Ed.). (2006). *Consumer Culture Theory: Toward a cultural resource-based theory of the consumer* (1st ed.). Emerald Group Publishing Limited.

Baldus, B. J., Voorhees, C., & Calantone, R. (2015). Online brand community engagement: Scale development and validation. *Journal of Business Research*, *68*(5), 978–985. https://doi.org/10.1016/j.jbusres.2014.09.035

Breidbach, C., Brodie, R., & Hollebeek, L. (2014). Beyond virtuality: From engagement platforms to engagement ecosystems. *Managing Service Quality*, *24*(6), 592–611. https://doi.org/10.1108/msq-08-2013-0158

Brodie, R. J., Benson-Rea, M., & Medlin, C. J. (2017). Branding as a dynamic capability. *Marketing Theory*, *17*(2), 183–199. https://doi.org/10.1177/1470593116679871

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer Engagement. *Journal of Service Research*, *14*(3), 252–271. https://doi.org/10.1177/1094670511411703

Brunk, K. H., & Boer, C. de (2020). How do Consumers Reconcile Positive and Negative CSR-Related Information to Form an Ethical Brand Perception? A Mixed Method Inquiry. *Journal of Business Ethics*, *161*(2), 443–458. https://doi.org/10.1007/s10551-018-3973-4

Carlini, J., & Grace, D. (2021). The corporate social responsibility (CSR) internal branding model: aligning employees' CSR awareness, knowledge, and experience to deliver positive employee performance outcomes. *Journal of Marketing Management*, *37*(7-8), 732–760. https://doi.org/10.1080/0267257X.2020.1860113

Cerny, B. A., & Kaiser, H. F. (1977). A Study Of A Measure Of Sampling Adequacy For Factor-Analytic Correlation Matrices. *Multivariate Behavioral Research*, *12*(1), 43–47. https://doi.org/10.1207/s15327906mbr1201_3

Chan, T. J., Mohd Suki, N., Ho, P. S. Y., & Akhtar, M. F. (2024). Impact of corporate social responsibility practices on consumer purchase intention of apparel products with

mediating role of consumer-retailer love. *Social Responsibility Journal*, *20*(5), 998–1014. https://doi.org/10.1108/SRJ-09-2023-0491

Chang, H. J., & Jai, T.-M. (2015). Is fast fashion sustainable? The effect of positioning strategies on consumers' attitudes and purchase intentions. *Social Responsibility Journal*, *11*(4), 853–867. https://doi.org/10.1108/SRJ-07-2014-0095

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297–334. https://doi.org/10.1007/BF02310555

Currás-Pérez, R., Dolz-Dolz, C., Miquel-Romero, M. J., & Sánchez-García, I. (2018). How social, environmental, and economic CSR affects consumer-perceived value: Does perceived consumer effectiveness make a difference? *Corporate Social Responsibility and Environmental Management*, *25*(5), 733–747. https://doi.org/10.1002/csr.1490

Du, S., Bhattacharya, C. B., & Sen, S. (2011). Corporate Social Responsibility and Competitive Advantage: Overcoming the Trust Barrier. *Management Science*, *57*(9), 1528–1545. https://doi.org/10.1287/mnsc.1110.1403

Eigenraam, A. W., Eelen, J., & Verlegh, P. W. (2021). Let Me Entertain You? The Importance of Authenticity in Online Customer Engagement. *Journal of Interactive Marketing*, *54*(1), 53–68. https://doi.org/10.1016/j.intmar.2020.11.001

Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, *8*(1), 37–51. https://doi.org/10.1002/tqem.3310080106

Fan, X., Thompson, B., & Wang, L. (1999). Effects of sample size, estimation methods, and model specification on structural equation modeling fit indexes. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 56–83. https://doi.org/10.1080/10705519909540119

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Gong, S., Sheng, G., Peverelli, P., & Dai, J. (2021). Green branding effects on consumer response: examining a brand stereotype-based mechanism. *Journal of Product & Brand Management*, *30*(7), 1033–1046. https://doi.org/10.1108/JPBM-03-2020-2785

Goyal, A., & Verma, P. (2024). The relationship between brand engagement, brand loyalty, overall brand equity and purchase intention. *Journal of Strategic Marketing*, *32*(1), 65–79. https://doi.org/10.1080/0965254X.2022.2149839

Guandalini, I. (2022). Sustainability through digital transformation: A systematic literature review for research guidance. *Journal of Business Research*, *148*, 456–471. https://doi.org/10.1016/j.jbusres.2022.05.003

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). *A primer on partial least squares structural equations modeling (PLS-SEM)* (2nd ed.). SAGE.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, *40*(3), 414–433. https://doi.org/10.1007/s11747-011-0261-6

Hammedi, W., Kandampully, J., Zhang, T. T., & Bouquiaux, L. (2015). Online customer engagement. *Journal of Service Management*, *26*(5), 777–806. https://doi.org/10.1108/JOSM-11-2014-0295

Harman, H. H. (1967). *Modern factor analysis*. University of Chicago Press.

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, *18*(1), 38–52. https://doi.org/10.1002/dir.10073

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hollebeek, L. D., Srivastava, R. K., & Chen, T. (2019). S-D logic–informed customer engagement: Integrative framework, revised fundamental propositions, and application to CRM. *Journal of the Academy of Marketing Science*, *47*(1), 161–185. https://doi.org/10.1007/s11747-016-0494-5

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Huang, T. K., Wang, Y.-T., & Lin, K.-Y. (2022). Enhancing brand loyalty through online brand communities: The role of community benefits. *Journal of Product & Brand Management*, *31*(5), 823–838. https://doi.org/10.1108/jpbm-08-2020-3027

Huang, Y.-C., Yang, M., & Wang, Y.-C. (2014). Effects of green brand on green purchase intention. *Marketing Intelligence & Planning*, *32*(3), 250–268. https://doi.org/10.1108/MIP-10-2012-0105

Jaakkola, E., & Alexander, M. (2014). The Role of Customer Engagement Behavior in Value Co-Creation. *Journal of Service Research*, *17*(3), 247–261. https://doi.org/10.1177/1094670514529187

Jung, W.-J., Yang, S., & Kim, H.-W. (2020). Design of sweepstakes-based social media marketing for online customer engagement. *Electronic Commerce Research*, *20*(1), 119–146. https://doi.org/10.1007/s10660-018-09329-0

Kline, R. B. (1998). *Principles and practice of structural equation modeling*. Guilford Press. https://www.researchgate.net/file.postfileloader.html?id=55fd1fce5cd9e3e32f8b4567&assetkey=as%3a275317059223552%401442652110342

Kock, N. (2015). Common Method Bias in PLS-SEM. *International Journal of E-Collaboration*, *11*(4), 1–10. https://doi.org/10.4018/ijec.2015100101

Kumar, T. P., Basavaraj, S., & Soundarapandiyan, K. (2024). Can co-creating in CSR initiatives influence loyal customers? Evidence from the banking industry. *Corporate*

Social Responsibility and Environmental Management, *31*(1), 180–195. https://doi.org/10.1002/csr.2561

Le Hau, N. (2019). The role of customer operant resources in health care value creation. *Service Business*, *13*(3), 457–478. https://doi.org/10.1007/s11628-018-00391-0

Lee, C.-Y., Chang, W.-C., & Lee, H.-C. (2017). An investigation of the effects of corporate social responsibility on corporate reputation and customer loyalty – evidence from the Taiwan non-life insurance industry. *Social Responsibility Journal*, *13*(2), 355–369. https://doi.org/10.1108/SRJ-01-2016-0006

Lynn, M., & Harris, J. (1997). The desire for unique consumer products: A new individual differences scale. *Psychology & Marketing*, *14*(6), 601–616. https://doi.org/10.1002/(SICI)1520-6793(199709)14:6%3C601::AID-MAR5%3E3.0.CO;2-B

Madupu, V., & Cooley, D. O. (2010). Antecedents and Consequences of Online Brand Community Participation: A Conceptual Framework. *Journal of Internet Commerce*, *9*(2), 127–147. https://doi.org/10.1080/15332861.2010.503850

Mowen, J. C., Fang, X., & Scott, K. (2009). A hierarchical model approach for identifying the trait antecedents of general gambling propensity and of four gambling-related genres. *Journal of Business Research*, *62*(12), 1262–1268. https://doi.org/10.1016/j.jbusres.2008.11.007

Muniz, A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, *27*(4), 412–432. https://doi.org/10.1086/319618

Okafor, A., Adeleye, B. N., & Adusei, M. (2021). Corporate social responsibility and financial performance: Evidence from U.S tech firms. *Journal of Cleaner Production*, *292*, 126078. https://doi.org/10.1016/j.jclepro.2021.126078

Organ, D. W., & Greene, C. N. (1981). The Effects of Formalization on Professional Involvement: A Compensatory Process Approach. *Administrative Science Quarterly*, *26*(2), 237. https://doi.org/10.2307/2392471

Osei-Frimpong, K., & McLean, G. (2018). Examining online social brand engagement: A social presence theory perspective. *Technological Forecasting and Social Change*, *128*, 10–21. https://doi.org/10.1016/j.techfore.2017.10.010

Phillips Melancon, J., Griffith, D. A., Noble, S. M., & Chen, Q. (2010). Synergistic effects of operant knowledge resources. *Journal of Services Marketing*, *24*(5), 400–411. https://doi.org/10.1108/08876041011060693

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Ramaswamy, V., & Ozcan, K. (2016). Brand value co-creation in a digitalized world: An integrative framework and research implications. *International Journal of Research in Marketing*, *33*(1), 93–106. https://doi.org/10.1016/j.ijresmar.2015.07.001

Rigdon, E. E. (2012). Rethinking Partial Least Squares Path Modeling: In Praise of Simple Methods. *Long Range Planning*, *45*(5-6), 341–358. https://doi.org/10.1016/j.lrp.2012.09.010

Rodrigues, P., & Borges, A. P. (2015). Corporate social responsibility and its impact in consumer decision-making. *Social Responsibility Journal*, *11*(4), 690–701. https://doi.org/10.1108/SRJ-02-2014-0026

Shmueli, G., Ray, S., Velasquez Estrada, J. M., & Chatla, S. B. (2016). The elephant in the room: Predictive performance of PLS models. *Journal of Business Research*, *69*(10), 4552–4564. https://doi.org/10.1016/j.jbusres.2016.03.049

Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' Need for Uniqueness: Scale Development and Validation. *Journal of Consumer Research*, *28*(1), 50–66. https://doi.org/10.1086/321947

Tsai, H.-T., Huang, H.-C., & Chiu, Y.-L. (2012). Brand community participation in Taiwan: Examining the roles of individual-, group-, and relationship-level antecedents. *Journal of Business Research*, *65*(5), 676–684. https://doi.org/10.1016/j.jbusres.2011.03.011

Wang, Y., & Berens, G. (2015). The Impact of Four Types of Corporate Social Performance on Reputation and Financial Performance. *Journal of Business Ethics*, *131*(2), 337–359. https://doi.org/10.1007/s10551-014-2280-y

Wirtz, J., Ambtman, A. den, Bloemer, J., Horváth, C., Ramaseshan, B., van de Klundert, J., Gurhan Canli, Z., & Kandampully, J. (2013). Managing brands and customer engagement in online brand communities. *Journal of Service Management*, *24*(3), 223–244. https://doi.org/10.1108/09564231311326978

Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment*, *28*(2), 286–300. https://doi.org/10.1002/bse.2224

Zhou, Z., Zheng, F., Lin, J., & Zhou, N. (2021). The interplay among green brand knowledge, expected eudaimonic well-being and environmental consciousness on green brand purchase intention. *Corporate Social Responsibility and Environmental Management*, *28*(2), 630–639. https://doi.org/10.1002/csr.2075

3.2.8 Appendix

Table 3.2-4: Latent variables and related items

Latent variable		Items	Reference(s)
Community workshops (WORK)	WORK1	I enjoy participating in adidas TERREX workshops offered via adiClub because I enjoy conversing with people similar to myself.	(Baldus et al., 2015)
	WORK2	I am motivated to participate in TERREX workshops organized through adiClub with other outdoor members who have similar interests.	
	WORK3	I look forward to discussing my opinions and learn more about the brand with others in TERREX workshops on the adiClub.	
Giving member feedback (FEED)	FEED1	Increasing the influence I have on the brand and its products makes me want to participate more on adiClub.	(Baldus et al., 2015; Hammedi et al. 2015)
	FEED2	I like to know that the feedback I give through adiClub is being considered by TERREX.	
	FEED3	I am motivated to participate on adiClub because I can help improve the brand and its products.	
Community challenges (CHAL)	CHAL1	I spend a lot of time engaging in TERREX challenges with other members posted on adiClub.	(Algesheimer et al. 2005;Tsai et al. 2012)
	CHAL2	I actively participate in adiClub challenges with other members because I feel better afterwards.	
	CHAL3	I frequently interact with other community members in TERREX challenges on adiClub.	
Raffles (RAFF)	RAFF1	I like participating in TERREX raffles on adiClub because I can win products or experiences.	(Baldus et al., 2015; Mowen et al., 2009)
	RAFF2	Having the chance to win products or experiences in TERREX raffles makes me want to participate more on adiClub.	
	RAFF3	Participating in TERREX raffles on the adiClub is fun for me, thanks to the possibility to win products or experiences.	
Member Exclusives & Pre-Sales (EXCL)	EXCL1	I value the access to member exclusives and pre-sales of new TERREX products on adiClub because I enjoy having things others do not.	(Lynn & Harris 1997; Tian et al., 2001)
	EXCL2	As adiClub member I enjoy buying TERREX Exclusives and new products before non-members because I am very attracted to rare objects.	

	EXCL3	I like interacting with the brand on adiClub to get access to pre-sales of new products and member Exclusives because I like to try new products before others do.	
Social brand perception (SOC)	SOC1	I receive useful assistance from TERREX when having questions or issues.	(Nguyen Hau, 2019; Carlini & Grace 2021)
	SOC2	TERREX takes great efforts to enable social gatherings among fellow outdoor enthusiasts.	
	SOC3	adidas TERREX provides useful information on how to connect with other TERREX community members.	
	SOC4	TERREX makes sure that members of the TERREX community support each other.	
Ecological brand perception (ECOL)	ECOL1	TERREX actively takes responsibility to protect the environment.	(Zhou et al 2020)
	ECOL2	Some environmental qualities of TERREX come to my mind quickly.	
	ECOL3	adidas TERREX is successful in operating ecologically sustainable.	
	ECOL4	TERREX is trustworthy about environmental promises.	
Economic brand perception (ECON)	ECON1	adidas TERREX offers outdoor products of higher quality than competitors.	(Melancon & Griffith, 2010)
	ECON2	TERREX does a better job than competitors offering high-performance, multi-functional and sustainable products.	
	ECON3	adidas TERREX is much better than competitors in relation to selection of new products/services.	
	ECON4	Using TERREX products helps me achieve my goals because they are of higher quality than those of competitors.	

Table 3.2-5: Descriptive statistics

Demographics/Characteristics	Specifications	Counts	Proportion (in %)
Gender	Female	80	47.9
	Male	84	50.3
	Diverse	30	1.8
Age	≤ 21 years	20	12.0
	22-30 years	47	28.1
	30-40 years	52	31.1
	>40 years	48	28.7
Residence	USA	63	37.7
	Germany	73	43.7
	United Kingdom	24	14.4
	Other	4	2.4
	No information provided	3	1.8
Education	School graduation	19	11.4
	Bachelor's degree	51	30.5
	Master's degree	70	41.9
	PhD degree	3	1.8
	Apprenticeship	17	10.2
	No information provided	7	4.2
Sports frequency per week	>3 times	81	48.5
	1-3 times	70	41.9
	<1 time	13	7.8
	No information provided	3	1.8
Sports activities	Trail running	112	25.6
	Mountain biking	46	10.5
	Hiking	108	24.7
	Climbing	32	7.3
	Cross-country skiing	24	5.5
	Skiing	37	8.4
	Snowboarding	14	3.2
	Ski touring	13	3.0
	Mountaineering	35	8.0
	None of above	17	3.9

Member level	Level 1	8	4.8
	Level 2	46	27.5
	Level 3	59	35.3
	Level 4	54	32.3
Member since	<3 months	7	4.2
	3-6 months	19	11.4
	6-12 months	49	29.3
	>1 year	81	48.5
	No information provided	11	6.6
Time per week on adiClub	<15 minutes	62	37.1
	15-30 minutes	43	25.7
	30-60 minutes	24	14.4
	>1 hour	18	10.8
	No information provided	20	12.0
Time per week other adidas digital platforms	<30 minutes	44	26.3
	30-60 minutes	57	34.1
	60-90 minutes	39	23.4
	>90 minutes	19	11.4
	No information provided	8	4.8

Table 3.2-6: Standardized indicator loadings

	1	2	3	4	5	6	7	8
WORK1						.905		
WORK2						.934		
WORK3						.876		
FEED1								.767
FEED2								.875
FEED3								.697
CHAL1					.781			
CHAL2					.891			
CHAL3					.896			
RAFF1							.785	
RAFF2							.881	
RAFF3							.807	
EXCL1				.951				
EXCL2				.850				
EXCL3				.815				
SOC1		.837						
SOC2		.821						
SOC3		.873						
SOC4		.872						
ECOL1	.867							
ECOL2	.880							
ECOL3	.859							
ECOL4	.916							
ECON1			.817					
ECON2			.838					
ECON3			.871					
ECON4			.852					

Note. Work = Workshop; Feed = Feedback; Chall = Challenges; Raff = Raffles; Excl = Member exclusives; SOC = Social brand perception; ECOL = Ecological brand perception; ECON = Economic brand perception.

Table 3.2-7: Fornell-Larcker criterion

	WORK	*FEED*	*CHAL*	*RAFF*	*EXCL*	*SOC*	*ECOL*	*ECON*
WORK	**.814**							
FEED	.466	**.780**						
CHAL	.522	.401	**.803**					
RAFF	.278	.288	.276	**.829**				
EXCL	.153	.211	.352	.330	**.855**			
SOC	.224	.238	.322	.235	.483	**.697**		
ECOL	.453	.303	.300	.211	.153	.331	**.755**	
ECON	.583	.554	.537	.283	.125	.280	.406	**.732**

Note. Work = Workshop; Feed = Feedback; Chall = Challenges; Raff = Raffles; Excl = Member exclusives; SOC = Social brand perception; ECOL = Ecological brand perception; ECON = Economic brand perception.

Chapter 4: Customer engagement for circularity in multi-stakeholder networks

Chapter 4 moves the focus from CSR to circularity and from dyadic brand–customer relationships to multi-stakeholder collaboration. It explores how customer engagement can promote circularity in the sportswear industry by integrating customers, brands, and business partners into shared processes of learning, innovation, and resource integration. The chapter builds on prior findings by applying the engagement logic studied in broader CSR contexts to specific sustainability efforts related to circularity, thereby moving the conceptualization of engagement from dyadic digital interactions toward hybrid, multi-actor settings.

Research paper 3 provides qualitative insights derived from interviews with employees, customers, and business partners of PUMA. Using these interview findings, a customer engagement framework for circularity is developed and applied to the study context, integrating a well-established customer engagement framework with circular practices identified in prior research. Additionally, three new engagement practices, *networking*, facilitating, and *entertaining*, are introduced. The study demonstrates how engagement for circularity emerges through shared practices among multiple stakeholders and identifies how brands can inform, educate, and involve customers in circular activities.

Building on these insights, the subsequent book chapter examines how circular strategies are implemented across PUMA, Patagonia, and H&M. Through a comparative case study analysis, it shows how value co-creation for circularity materializes in concrete initiatives such as repair programs, material innovation, and take-back schemes.

4.1 Customer engagement in circular economy initiatives: Exploring pathways toward climate change mitigation in the apparel industry (Research Paper 3)

Authors Frederic Dreher, University of Bayreuth, Germany

Prof. Dr. Tim Ströbel, University of Bayreuth, Germany

Published in: Dreher, F., & Ströbel, T. (2026). Customer engagement in circular economy initiatives: Exploring pathways toward climate change mitigation in the apparel industry. *Journal of Business Research*, 214, 1–14.

https://doi.org/10.1016/j.jbusres.2026.116286

ABSTRACT

Understanding how brands foster customer engagement in the circular economy (CE) is a critical yet under-researched area. Here, we explore how specific circular practices manifest within the apparel industry. Building on Hollebeek et al.'s (2019) customer engagement framework and the circular engagement practices identified by Verleye et al. (2024), we conducted an abductive single-case study analyzing 31 semi-structured interviews with PUMA employees, partners, and customers. We identify eight practices across knowledge sharing, resource integration, and customer learning. Beyond established practices, we reveal that networking, facilitating, and entertaining are critical for fostering social interaction, reducing participation effort, and catalyzing motivation. Theoretically, we propose a refined framework conceptualizing how customer engagement along these practices fosters sustained circular behavior. For managers, we show that circularity must be designed as a convenient, social, and rewarding experience to mobilize sustained customer involvement.

Keywords: *circularity, customer engagement, practices, apparel industry, apparel brands*

4.1.1 Introduction

In recent years, the entangled environmental crises of climate change, loss of biodiversity, and pollution have become increasingly challenging. Steady global population growth, combined with increasing urbanization, has driven consumption to ever-new highs, whereas natural resources remain scarce and finite (Ghisellini et al., 2016). For instance, by 2050, the world population is estimated to reach approximately 9 billion and consume resources at more than three times today's rate (Álvarez et al., 2026; UN, 2023). Therefore, the unsustainable levels of human activity are a major driver of the environmental emergency (Schill & Fosse-Gomez, 2025). In response, firms are launching an increasing number of strategies focusing on more sustainable production and consumption. One such strategy focusing on reducing resource consumption is called the circular economy (CE) (Patwa et al., 2021; Zhu et al., 2022).

CE is an economic system based on a business model that reduces the negative environmental impacts of the linear, "take-make-use-dispose" model by reusing, recycling, reducing, and recovering resources, materials, and products in the production-consumption cycle (Castro et al., 2022; Lieder & Rashid, 2016). As CE aims to keep resources at their highest value for as long as possible (Frishammar & Parida, 2019), it allows firms to decouple economic growth from climate change through waste minimization, cleaner production, and product-life extension (Castro-Lopez et al., 2023). Although CE concepts emerged in the late 1970s, governments, academia, and companies have only recently begun systematically implementing them as pathways toward sustainability (Abu-Bakar et al., 2024).

However, widespread adoption remains limited, as many firms struggle to operationalize CE. Moreover, research remains at an early stage (Hetherington et al., 2024; Suresh et al., 2024). Recent studies have explored the feasibility and barriers of circular strategies (Gallego-Schmid et al., 2025), circular business model design (Geissdoerfer et al., 2018; Mostaghel &

Chirumalla, 2021), the role of digital platforms (Schwanholz & Leipold, 2020), and firm-customer interactions (Anderluh et al., 2025; Frishammar & Parida, 2019).

However, climate change in the context of CE and customer engagement remain largely disparate topics (Odou & Schill, 2020). Customer engagement can be defined as "customers' positively valenced brand-related cognitive, emotional, and behavioral activity during or related to focal customer/brand interactions" (Hollebeek et al., 2014, p. 154). Customers' resource investment in brand interactions contribute to the welfare of the social and natural environment (Hollebeek et al., 2019; Pucci et al., 2020). Thus, customers' positive climate change engagement is critical for achieving circularity. While extant research conceptually links circular practices to climate change mitigation, empirical insights into how such engagement is enacted at the micro level remain limited.

Addressing these gaps, we focus on customers' engagement in brand-facilitated circular practices, and interpret these practices as behavioral and interactional mechanisms that can contribute to climate change mitigation (Bellezoni et al., 2022; Chowdhury et al., 2022; Felice et al., 2025; Le Ha, 2025; Verleye et al., 2024). Rather than directly observing climate change engagement as an explicitly articulated motivation, we examine how engagement in circular practices can be a pathway through which climate relevant engagement emerges. Moving beyond isolated pro-environmental actions, we emphasize interactive, participatory, and co-created engagement through which customers actively collaborate with brands and other stakeholders to shape circular initiatives over time (Mostaghel & Chirumalla, 2021; Re & Magnani, 2022).

Circular practices provide the critical link between engagement and mitigation by translating the abstract challenge of climate change into tangible activities such as repair, reuse, refurbishment, and material recirculation (Leal Filho et al., 2024). Through these practices, customers not only reduce consumption-related emissions but also help curb the production

of new goods and materials. Therefore, positive climate change engagement is forward-looking and transformation-oriented, and is expressed through customers' interactions, learning, and resource integration in support of circular modes of production and consumption (Hollebeek et al., 2019). CE initiatives are frequently portrayed as collaborative efforts between brands and customers that translate climate change mitigation into tangible practices (Re & Magnani, 2022). Yet, limited empirical research systematically examines how customers engage with brands in these sustainability-oriented contexts (Chuah et al., 2020; Pucci et al., 2020).

Here, we focus on PUMA, a globally recognized athletic apparel brand. It operates in a sector that is among the most resource-intensive and polluting industries, and remains strongly characterized by linear production and consumption patterns, high consumption frequency, and short product lifecycles. Concurrently, it faces substantial barriers in transitioning toward circular business models and fostering customer adoption of circular practices (Salmi & Kaipia, 2022). Despite increasing regulatory and societal pressure, the transition toward CE models in this sector remains challenging. This is because firms are constrained by path dependencies, existing product portfolios, and entrenched operational routines, while circular initiatives often face limited customer adoption (Salmi & Kaipia, 2022).

Meanwhile, the apparel industry is at the forefront of experimenting with circular practices such as take-back schemes, recycling programs, repair services, and product-service systems, which inherently require active customer participation (Mishra et al., 2021). Within this context, PUMA is known for its innovative sportswear and lifestyle products, and its commitment to sustainability. We examine its circular practices developed in collaboration with customers, particularly focusing on two recent initiatives: the RE:FIBRE project, which recycles polyester textile waste into new garments; and RE:SUEDE project, which develops a biodegradable version of PUMA's iconic Suede sneaker. While our empirical focus is on

apparel, similar challenges of encouraging customer participation in reuse, return, and recycling systems can be observed across other product-centric industries such as electronics, furniture, and consumer goods, suggesting broader applicability of the derived insights. Our main research question is as follows: *How can customer engagement in circular practices act as a pathway toward climate change engagement?*

4.1.2 Theoretical background

4.1.2.1 Customers' positive climate change engagement in the context of circularity

Branding is crucial in shaping customers' perceptions of a company's ethical responsibility and sustainability commitments (Chuah et al., 2020). As brands move beyond traditional marketing to incorporate societal and environmental responsibilities, value co-creation has emerged as a central mechanism through which brands and customers collaboratively fight climate change (Odou & Schill, 2020; Wannow & Haupt, 2026). This shift aligns with the evolving understanding of brands being dynamic entities shaped through actor interaction rather than passive symbols (Brand et al., 2025). Customers, as central actors, have become active resource integrators and push for social and green branding efforts (Zhou et al., 2021). Therefore, customer engagement in climate-positive behaviors is central to sustainable branding (Chuah et al., 2020; Schiaroli et al., 2024). Climate change engagement reflects an individual's cognitive, emotional, and behavioral responses to climate-related challenges (Köcher et al., 2025; Schill & Fosse-Gomez, 2025). Beyond raising awareness, brands must provide engagement platforms that enable customers to co-create value through sustainable actions (Brand et al., 2025; Re & Magnani, 2022).

Rather than merely knowing about climate change, customers must also be able to act upon it. Therefore, brands should engage with their customers on the issue of climate change in a manner that allows customers to inform themselves, makes them feel personally involved, and motivates them to contribute and express their concerns (Wannow & Haupt, 2026).

Owing to the brand's engagement efforts, customers may display greater brand satisfaction and loyalty (Jaakkola & Alexander, 2014a), and be more likely to contribute to the brand's product and service offering. This further reinforces customers' engagement with the brand (Chandler & Lusch, 2015). Customers' engagement with specific brand-related offerings, initiatives, or touchpoints can be strategically used to create socio-cultural change and transition pathways that can alter, slow, or minimize the trajectory of climate change globally (Mostaghel & Chirumalla, 2021). Hence, engaging with customers is critical for brands seeking to foster positive climate change behavior (Pucci et al., 2020).

CE naturally aligns with positive climate change engagement by aiming to minimize waste, improve resource efficiency, extend the lifecycle of products and parts, and foster innovation (Bellezoni et al., 2022; Liu & Zhang, 2026). From a customer engagement perspective, CE necessitates active participation from multiple actors, including customers, businesses, and policymakers, to co-create sustainable value (Ghisellini et al., 2016). Customers play a vital role in a CE as they need to be interested and involved in tackling climate change through resource recirculation, and educated on the environmental benefits of sustainable products (Kazeminia et al., 2016). Therefore, if CE branding must function as a pathway through which climate change engagement emerges, it must extend beyond messaging to actively facilitate reuse, recycling, and remanufacturing practices (Mostaghel & Chirumalla, 2021). Here, circular practices are increasingly recognized as critical climate mitigation levers, as they address not only consumption-related impacts but also reduce production-related emissions by extending product lifecycles and minimizing resource extraction (Bellezoni et al., 2022).

Brands across industries have begun introducing business models focusing on incentivizing material recirculation and designing products with longer life spans. In particulars, the apparel industry has started making efforts toward circularity because it is one of the largest

and influential, and polluting and resource-draining industries globally (Pal & Gander, 2018). However, efforts to expand circular business models often fall short because brands lack clarity on how to promote customer engagement in circular practices as a pathway toward climate relevant outcomes (Mostaghel & Chirumalla, 2021).

4.1.2.2 Conceptualizing customers' engagement in circularity

To examine how customers engage with PUMA and its business partners in circular activities to combat climate change, we build on the integrative customer engagement framework of Hollebeek et al. (2019). As this framework is inherently customer-focused and captures the multidimensionality of engagement, it aligns with our research goal. The framework is informed by the service-dominant (S-D) logic, postulating that customers deliberately invest their focal operant (e.g., knowledge and skills) and operand resources (e.g., equipment) into brand interactions in service systems (Hollebeek et al., 2019; Vargo & Lusch, 2004). Customers' brand-related operant resources include emotional aspects (e.g., brand imagery), cognitive elements (e.g., knowledge of a brand's legacy), social skills developed through brand-based interactions, and behavioral abilities like effectively using brand products (Vargo & Lusch, 2008). Hence, operant resources reflect the multidimensionality of engagement and are pivotal for customer engagement (Brodie et al., 2011). Furthermore, they are an essential source of competitive advantage (Vargo & Lusch, 2016b).

The framework of Hollebeek et al. (2019) comprises three foundational processes crucial to fostering engagement. First, customer resource integration denotes a customer's integration, adaptation, and utilization of focal operant and/or operand resources into other actors' processes for brand-related utility optimization (Skålén, Gummerus, et al., 2015; Vargo & Lusch, 2008, 2016b). Second, customer knowledge sharing is communicating specific perceived brand knowledge, including information- or experience-based knowledge, with others in their networks to create value for the recipient(s), themselves, or both (Ho &

Ganesan, 2013). Third, customer learning is defined as an iterative process wherein customers develop mental rules and guidelines for processing relevant brand-related information, acquire new brand knowledge or insights, and adjust their behavior based on the newly gained understanding (Mena & Chabowski, 2015). These foundational processes engender benefits coinciding with engagement. Crucially, the interplay of customer knowledge sharing and customer resource integration fosters value co-creation, which refers to the perceived value derived from interactive, collaborative, or personalized brand-related activities (Ranjan & Read, 2016; Vargo & Lusch, 2008). Additionally, customer knowledge sharing and customer learning engender customer interpersonal operant resources, encompassing a customer's perceived growth or refinement in their brand-related operant resources (Vargo & Lusch, 2008). Finally, when paired with customer resource integration, customer learning contributes to the development of individual operant resources, characterized by the perceived strengthening of personal brand-related knowledge and skills through brand interactions (Vargo & Lusch, 2008, 2016b).

Building on these dynamics, we apply the framework of Hollebeek et al. (2019) to the context of customer engagement in circular practices, treating climate change engagement as an implied downstream effect and responding to the authors' call for empirical validation. Specifically, we examine how customers engage with PUMA and its business partners through various engagement practices in a CE that are in line with the framework's three dimensions. Recent developments in the S-D logic emphasize social constructivism, recognizing recurring practices to be essential for customer engagement (Vargo & Lusch, 2016b). Schau et al. (2009, p. 31) define practices as "linked and implicit ways of understanding, saying, and doing things." Practices "comprise a temporally unfolding and spatially dispersed nexus of behaviors that include practical activities, performances, and representations or talk" (Schau et al., 2009, p. 31). As such, practices are repeated actions that

facilitate engagement by enabling individuals to develop shared meanings and demonstrate competencies reinforcing social order (Reckwitz, 2002). This study adopts the practices identified by Verleye et al. (2024) in the context of actor engagement in the CE. As we seek to comprehensively examine how customers engage with a brand in circular activities, we match the practices of Verleye et al. (2024) to the three dimensions of Hollebeek et al.'s (2019) customer engagement framework. This helps us examine how these practices ensue within the customer space and identify what is missing from the current practices.

Verleye et al. (2024) propose a set of six practices—*matching, supporting, signaling, empowering, convincing,* and *legitimizing*—to examine how actors engage in the CE. First, *matching* and *supporting* fall within the framework's dimension of customer resource integration. *Matching* refers to connecting with others to exchange mutually reinforcing resources in a circularity context. *Supporting* is defined as providing operand resources to a focal actor to embrace circularity. Customers can integrate their resources to contribute to circularity only with adequate operand resources (e.g., infrastructure).

Second, the customer knowledge sharing dimension entails *signaling* and *empowering*. *Signaling* means informing actors about the potential benefits of engaging in a CE. Accordingly, the practice aligns with customers' knowledge sharing, providing others with brand- and circularity-related information. *Empowering* is about developing a focal actor's operant resources for embracing circularity. Customers can effectively share relevant insights with others due to their improved knowledge and skills.

Third, the practice of *convincing* relates to the framework's dimension of customer learning. *Convincing* influences a focal actor's perception of financial and pragmatic benefits of engaging in circularity, shaping their mental rules and processing of circularity-related information. This corresponds with customer learning, which involves acquiring new brand knowledge and modifying behavior based on insights gained.

Finally, we exclude the practice of *legitimizing*, which encompasses creating an institutional context for circularity. While Verleye et al. (2024) identify *legitimizing* as a distinct engagement practice, it did not emerge as a salient and distinct category in our empirical data. Elements of legitimizing, such as signaling approval or encouraging the broader acceptance of circular initiatives, were occasionally observable. However, they were typically embedded within other practices, particularly *networking* and *convincing*, rather than enacted as a standalone practice. Thus, in a circular customer engagement context, *legitimizing* may operate more implicitly through relational and communicative processes rather than as an explicit, discrete practice. Meanwhile, we acknowledge that such behaviors remain theoretically relevant for climate-relevant engagement, even if they are not directly articulated by participants. Accordingly, we do not treat *legitimizing* as a separate category but acknowledge its indirect presence within the broader configuration of engagement practices identified in this study.

Overall, extant research highlights customer engagement's importance for both circularity and climate change mitigation yet lacks a detailed understanding of how such engagement is enacted through specific practices. Addressing this gap, we examine how customer engagement unfolds in circular business models and how these practices may contribute to climate relevant outcomes.

4.1.3 Methodology

As research on circularity needs in-depth analysis, the case study approach is appropriate (Yin, 2014b). Hence, this study employed a single case study approach, effectively capturing reality by examining the interactions between PUMA, its business partners, and customers in a natural context (Cavaye, 1996b). We deliberately chose a brand from the sports apparel industry, owing to its extraordinary identification potential, high customer loyalty, and well-established traditions. This fostered strong engagement among the brand's actors. Because

PUMA is one of the most well-known brands worldwide, customer interactions are manifold. One of PUMA's flagship projects is called RE:SUEDE, which was launched in 2021. This is a pilot project focused on developing a biodegradable sneaker made from sustainable materials, which customers return after use for industrial composting. The initiative aimed to test the feasibility of circular design and end-of-life solutions. Selected customers were actively involved in the project by testing the shoes and providing structured feedback to help refine the design and assess the feasibility of circular consumption behaviors. Another initiative by the company was RE:FIBRE, which focused on textile-to-textile recycling to create a closed-loop system for PUMA apparel. As part of this initiative, PUMA collaborates with popular soccer clubs, such as Borussia Dortmund, Manchester City, and AC Milan, by having players wear jerseys made from recycled materials. The initiative also includes a joint takeback scheme where fans can return old garments at designated locations. Moreover, PUMA seeks to drive fan engagement by organizing events, such as meet-and-greet sessions with former soccer players, to incentivize participation in circularity efforts.

We collected data via 31 semi-structured interviews with employees, business partners, and customers using Microsoft Teams (Qu & Dumay, 2011b) (see table 4.1-1). Participants were selected using the following criteria: (1) PUMA managers involved in circular projects or day-to-day work related to circularity, including 12 employees from different business units and 4 from the central sustainability team; managers from various business units were deliberately selected because each sport has its specificities, leading to varied priorities and challenges related to circularity. (2) Business partners collaborating with PUMA in different areas of circularity, including 2 recycling partners, 3 employees from two different companies working with PUMA on circular innovation and an overall circular strategy, and 1 employee of a major retail partner. (3) Finally, 9 strongly involved customers who participated in the RE:SUEDE project, and were thus familiar with circularity topics.

One interview guide was developed for each participant group of employees, business partners, and customers, and was deliberately open and exploratory. This ensured that it was informed by general insights from customer engagement research and CE literature, but not structured around specific engagement dimensions or predefined circular practices. They focused on general efforts and knowledge about circularity, interactions in circular activities, engagement levels, and future changes needed to advance circular efforts.

This design choice was intentional, as our analytical framework operates at a higher level of abstraction than the experiential language used by participants. Structuring the interviews around specific theoretical dimensions ex ante would have risked imposing academic categories on respondents' accounts and constraining the emergence of practice-based insights. Accordingly, the interview questions focused on eliciting participants' experiences with circular initiatives, digital platforms, and interactions with brands and other stakeholders. This design enabled circular practices to emerge in participants' own terms and enhanced ecological validity in a context where customer roles are still evolving.

Accordingly, although our empirical data capture engagement in circular practices rather than explicit climate change motivations, we interpret these practices as a pathway through which climate-relevant engagement may emerge, given the well-established connection between circularity and emissions reduction. The protocol was pre-tested with two PUMA employees for clarity. The full interview guide is available in the Appendix.

Following an abductive research logic (Dubois & Gadde, 2002), we paired open interview design with a theory informed, iterative analysis. The integrative framework combining customer engagement (Hollebeek et al., 2019) and circular engagement practices (Verleye et al., 2024) served as an analytical lens during coding and interpretation. While the design prioritized empirical openness at the data generation stage, it allowed theory and data to iteratively inform each other during analysis. This approach is particularly suitable for

studying emergent forms of engagement in CE contexts, where established theoretical categories may not yet fully capture how practices unfold.

The interviews lasted between 21 and 44 minutes. They were transcribed verbatim, excluding fillers, non-verbal communication, and stutters, which may detract from the actual content of the interviewee's words (MacLean et al., 2004a). Subsequently, the qualitative interview data were systematically analyzed, drawing on the guiding frameworks proposed by Spiggle (1994a) and G. D. McCracken (1988). Specifically, we applied categorization, abstraction, comparison, and integration to identify themes and practices grounded in the empirical data. During categorization, interview statements were grouped into initial codes reflecting recurring topics. Through abstraction, these codes were then synthesized into broader thematic patterns. Comparison allowed us to examine similarities and differences across interviews. Meanwhile, integration helped connect these insights into a cohesive understanding of circular engagement practices. This process was complemented by the coding approach of Miles and Huberman (1994b), which emphasizes iterative coding and constant comparison to develop a structured and reliable coding scheme. To enhance coding rigor, a subset of interviews was initially independently coded to develop a preliminary coding scheme, which was then iteratively refined through joint discussions. Disagreements in coding were resolved through discussion until consensus was reached. With Cohen's kappa at $k = .83$ for coded interviews, intercoder reliability is satisfactory (Cohen, 1960a, 1968a).

Iteration occurred through repeated movement between empirical observations and the integrative engagement framework. Throughout this process, emerging codes were continuously compared across interviews to ensure consistency and conceptual clarity. This enabled theoretical constructs and empirical insights to iteratively inform one another during the analysis, facilitating the systematic organization of data into meaningful categories and

subcategories while enhancing analytical clarity and rigor. For example, when interviewees described certain circular activities in terms that did not align with existing engagement practices, these observations were iteratively compared with the theoretical framework, prompting the refinement of existing categories and development of new ones to better capture the underlying engagement mechanisms. Data collection and analysis proceeded iteratively until theoretical saturation was reached (i.e., until no new themes or insights relevant to the research question emerged).

Following this abductive approach, we used ATLAS.ti to systematically code the data based on the previously outlined customer engagement dimensions and practices. The coding process followed a three-step structure. First, open coding was conducted to capture participants' concrete actions, experiences, and perceptions in relation to circular initiatives (e.g., attending workshops, using digital tools, returning products, or providing feedback), yielding 36 initial first-order codes that remained close to the empirical material. Second, these first-order codes were iteratively mapped onto higher-order categories derived from the integrative framework, encompassing Hollebeek et al.'s (2019) customer engagement dimensions (knowledge sharing, customer learning, and resource integration) and the six circular practices proposed by Verleye et al. (2024). Third, where empirical patterns could not be adequately represented by these predefined categories, additional practice-level codes were developed.

During the coding process, circular practices were identified that could not be subsumed under the predefined codes. These additions are driven by our customer-focused approach, recognizing that customers interact (Hollebeek, Sprott, et al., 2021; Quintelier et al., 2023), appreciate convenience (Roy et al., 2020; Shashi et al., 2024), and seek motivation (Bazi et al., 2023; Brodie et al., 2011; Odou & Schill, 2020). Therefore, three new practices, namely

networking, *facilitating*, and *entertaining*, were developed based on the interview data. Then, corresponding codes were created to reflect them.

This abductive refinement, wherein empirical patterns prompted the initial theoretical framework's extension, yielded a final coding structure comprising three overarching dimension codes and eight distinct practice-level codes, capturing both theoretically derived and empirically emergent patterns. For instance, interviewees described upcycling workshops and gamified brand experiences as "fun" and "playful," aspects not captured by existing practices. Initially, these responses were coded under existing practices. However, iterative comparison across interviews revealed that these codes could not fully capture the experiential, enjoyment-oriented aspects emphasized by participants. This discrepancy prompted a refinement of the coding structure and the conceptual differentiation of a new practice, *entertaining*, defined by its ability to generate playful, enjoyable interactions that foster circular engagement. This example illustrates the abductive process, showing how raw empirical patterns guided the adaptation and extension of the theoretical framework rather than merely fitting observations into preexisting categories.

Member checking was performed to enhance our findings' credibility. Selected participants were provided with summarized results of their interviews and invited to provide feedback on whether the interpretations accurately reflected their experiences. All feedback was incorporated to refine the coding structure and final analysis. All research activities complied with ethical standards and the legal requirements under the General Data Protection Regulations (GDPR). Informed consent was obtained from all participants at the beginning of each interview before any questions were asked. The interviewer explicitly explained the study's purpose, participants' voluntary participation, their right to withdraw at any time, and how their data would be used. Participants were also explicitly asked for permission to record and transcribe the interview. Data was anonymized during transcription by removing personal

identifiers and assigning participant codes. Audio recordings were securely stored on encrypted drives accessible only to the research team and all transcripts were password-protected to prevent unauthorized access. These measures ensured participant privacy, data confidentiality, and compliance with GDPR requirements. Having established the coding structure and identified the emergent practices, we now describe each of the latter.

First, *networking* refers to facilitating interactive, social, and knowledge-sharing activities. It fosters community-driven learning, enabling customers to actively participate in discussions, workshops, and collaborative initiatives which enhance their understanding and application of circular behaviors. While both *matching* and *networking* involve interaction among customers around circularity topics, they serve distinct analytical functions. *Matching* focuses on the functional coordination of complementary resources between actors to enable specific circular outcomes. Conversely, *networking* emphasizes the creation of social interaction spaces wherein customers exchange experiences, construct shared meanings, and motivate each other over time. Whereas *matching* addresses who should collaborate to effectively align resources, *networking* addresses how ongoing interaction sustains engagement through social learning and collective sensemaking. Collapsing *networking* into *matching* can obscure these social and relational dynamics, which are particularly critical for understanding how circular engagement diffuses and stabilizes beyond isolated resource exchanges. Hence, *networking* falls within the framework's dimension of customer knowledge sharing because it emphasizes exchanging brand-related information and experiences among customers.

Second, *facilitating* supports customers in adopting new behaviors by providing digital tools which simplify engagement in circularity. It differs from *supporting* in its analytical focus. *Supporting* refers to the provision and availability of resources or infrastructure which make circular participation possible. However, *facilitating* captures how brands reduce friction in engagement processes by simplifying access, enhancing usability, and lowering effort across

touchpoints. This distinction is particularly relevant in circular contexts, where engagement often fails due to perceived complexity or inconvenience. Hence, *facilitating* aligns with the customer resource integration dimension as tools which should be used to ease the process of adopting circular behaviors by providing support, guidance, and convenience.

Third, we define *entertaining* as motivating customers to contribute to a CE through enjoyable, emotionally rewarding, and socially attractive experiences. Rather than constituting a learning practice per se, *entertaining* functions as a motivational catalyst that lowers psychological barriers and increases customers' willingness to engage, thereby enabling and amplifying customer learning processes. Therefore, these additions to Verleye et al. (2024) are data-driven rather than purely conceptual and were introduced into our research framework while analyzing the empirical findings (see figure 4.2-1). The resulting framework illustrates customer engagement in circular practices and positions it as an enabling mechanism through which such practices may contribute to climate change mitigation.

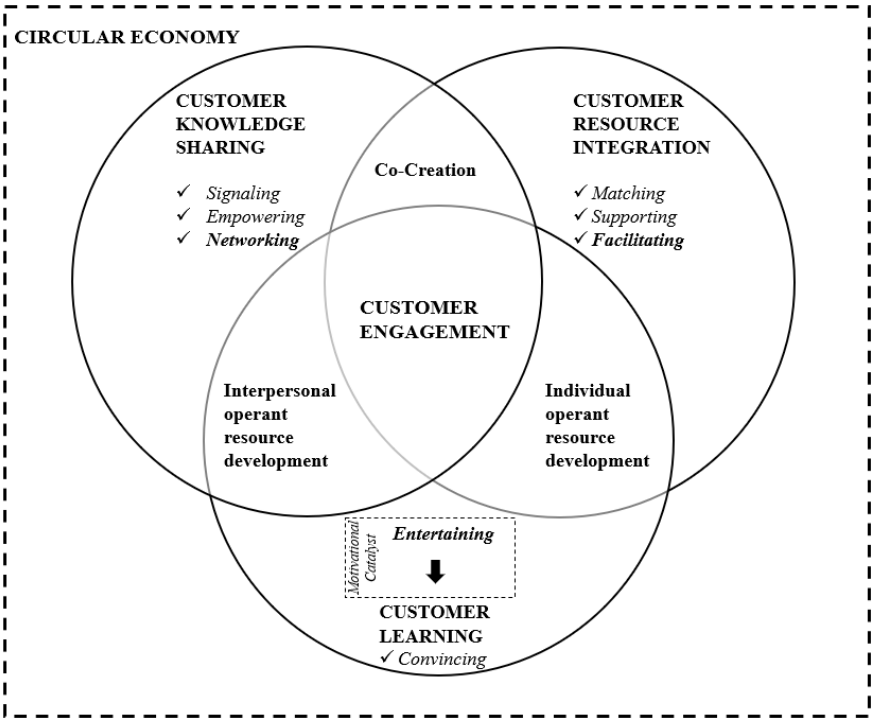


Figure 4.1-1: Conceptual model of customer engagement in circular practices - adapted from Hollebeek et al. (2019) and Verleye et al. (2024)

4.1.4 Findings

4.1.4.1 Customer knowledge sharing in the CE

4.1.4.1.1 Signaling through transparent information and education of customers

Brands can foster customer engagement in circular practices by increasing transparency around their initiatives and informing customers about relevant developments and benefits, thereby creating a pathway through which climate change engagement may emerge. As an employee of a major Retail partner (P1) of PUMA stated, customers must have easy access to information on the circularity efforts.

"We are trying to figure out the best way to deliver our messages to the customers together with PUMA. We think it is very important to inform them about this topic and show them what we do, but we keep it very factual at the moment to avoid any kind of overpromising."

A PUMA employee (E3) added that this makes digital means indispensable, effectively providing information to customers.

"On our website, we have a section called Forever Better, which is dedicated to informing our customers about our sustainability efforts. […]. We have a podcast on Spotify where employees from the sustainability team share information on how circularity contributes to reducing CO2 emissions or how customers can engage in circular activities."

This was confirmed by a customer (C1) who perceives PUMA's communication on its sustainability efforts as genuine.

"For me, it is important to get information that I think is real and reliable and not exaggerated. I think that PUMA could still communicate more, for example, how products are sourced, produced, and recycled, but what they communicate is credible."

4.1.4.1.2 Networking through workshops and community events

Networking is crucial in customer knowledge sharing by fostering interactive, social, and experience-driven information exchanges between brands and customers. Unlike one-way

communication, *networking* actively connects customers with brand representatives and among each other, creating a shared space for discussion, learning, and collaboration. For example, E1 mentioned that while digital communication mediums are effective for communicating with customers, PUMA also continues to inform and educate customers offline.

"We have an initiative called Voices of Regeneration, where we regularly invite people from outside the industry to have a chat on how they perceive PUMA's circularity efforts. This is well perceived because it adds a personal touch, and we can address specific questions that customers might have. However, it also helps us to understand where we can still improve our communication on circularity and what our customers are most interested in."

C5 also highlighted the relevance of offline get-togethers through interactive workshops and events.

"I think in the end, circularity is a joint effort, so we need to connect about it. […] For example, PUMA could host local gatherings where they set up upcycling stations. […] Further, it's not just about the gear; it's about the experience. Live music, maybe some local food trucks, creating this vibe where sustainability is not just a task but […] a celebration."

Finally, C6 increased customers' involvement in the design process by offering collaborative design workshops where customers can actively participate in product design.

"PUMA could set up pop-up customization stations in their stores or offer design workshops. You can be the designer of your gear and get inspired by exchanging ideas with others or receiving feedback from actual designers."

These examples illustrate how networking enables a more engaging and participatory approach to sharing customer knowledge and transforming circularity into a social and interactive experience.

4.1.4.1.3 Empowering through close collaboration with customers along the product lifecycle

Promoting circularity entails fostering collaboration, sharing knowledge, and contributing throughout the product lifecycle. This requires *empowering* customers by developing their operant resources. This encompasses enhancing their knowledge, skills, and ability to make informed decisions about circularity. By actively involving customers in feedback loops and product development processes, *empowering* participants ensures that they are not just passive recipients of sustainability efforts but are active and knowledgeable in circular initiatives. As E4 indicated, it does not create any value if PUMA develops new, circular products, while customers neither buy nor return them at the end of their life cycle. E5 provided an example of how PUMA ensures customers are *empowered*, and can develop their operant resources by exchanging information and feedback in jointly developing circular products.

"We have this footwear program called RE:SUEDE. Our goal is to develop a biodegradable shoe, produce and sell it, and eventually collect it from customers and biodegrade it. To get customer feedback, we sent 500 pairs to eligible participants willing to test and regularly use the product for a certain period. We received super valuable feedback."

Hence, by letting customers test the shoes, share real-life feedback, and see how their input shapes the product, PUMA *empowered* them to become part of the solution. The testing process also encouraged customers to think more deeply about circularity and potentially develop their own ideas on contributing. This is underlined by C5, who stated that circular feedback loops are effective for feeling more engaged and *empowered* in PUMA's circular efforts.

"Talking about the RE:SUEDE, it is a good start, and I think it is a cool effort. I was happy to be part of it, and hopefully, my feedback and that of the other participants can help to improve the shoes further."

The three aforementioned practices within the knowledge sharing dimension work together in a mutually reinforcing manner to enhance customer understanding and participation in circular initiatives. *Signaling* provides customers with clear, credible information about circular practices, establishing the knowledge base necessary for informed engagement. *Networking* builds on this by creating interactive spaces for discussion, social learning, and experience exchange, allowing customers to contextualize and apply the information received. *Empowering* complements these practices by actively involving customers in feedback loops, product testing, and co-creation, ensuring that knowledge is translated into actionable skills and operant resources. Together, these practices create a layered process wherein customers not only receive information but also engage socially and experientially, engendering deeper understanding and more meaningful engagement in circular activities.

4.1.4.2 Customer resource integration in the CE

4.1.4.2.1 Supporting through strong relationships with strategic sustainability partners

Under the customer resource integration dimension, *supporting* involves equipping customers with operand resources to facilitate their engagement in circular activities. Ensuring customers return old products, correctly recycle, or participate in circular initiatives requires the right tools, infrastructure, and access to make sustainable choices feasible. A concrete example is the RE:SUEDE footwear project, where PUMA ensured that logistical support was in place for customers to return the used pairs of shoes. This practical support enabled customers to act on their intention to participate, making it easy and attractive to do so. As E5 described, participants were provided clear guidance and the necessary infrastructure. Furthermore, P2 elaborated on the project from a business partner's perspective:

"It was about discussing with PUMA an entirely new business and operating model because if we can do it the right way, it's a huge opportunity. […] Further, we found a solution on

making sure that if we put PUMA's sneakers in our composting facility, we can assure that they biodegrade."

Thus, collaboration with customers alone is not enough. Rather, brands must also work closely with business partners to build the necessary infrastructure that allows customers to effectively integrate their resources. E8 highlighted that customers' resource integration for circularity can only occur if brands collaborate with specialized recyclers and strategic sustainability partners.

"We don't have our supply chain, so we rely on our partners to work on innovative materials and new or improved ways of recycling. For example, we are in steady exchange with our suppliers to communicate our needs and get updates on what they are working on."

P2 underlined the importance of collaborating with other recyclers and manufacturers for recycling.

"We are now facing the difficult recycling challenges, but the difficult ones can only be solved if you have an open discussion with the producers of raw materials, the factory that makes the products, the people that use the products, and the waste management companies that collect, sort, and transform them into new feedstock."

Altogether, *supporting* is not just about what is offered directly to customers, but also about enabling the conditions behind the scenes through partnerships and systems so that customers can easily and meaningfully participate in circular initiatives.

4.1.4.2.2 Matching using online interactions

In the customer resource integration context, *matching* focuses on resource exchange by facilitating direct collaboration among customers, the brand, and its business partners. Unlike *networking*, which focuses on building relationships and fostering informal knowledge exchange through social interactions among customers, *matching* provides structured opportunities for customers to exchange tangible resources, such as feedback, used products,

or sustainability-related content. C3 suggested enhancing *matching* by enabling structured exchanges through online platforms:

"You could easily produce or watch tutorials on social media with tips for sustainable living. For example, I sometimes watch tutorials on how to clean my white sneakers, remove stains from clothes, or upcycle old garments into something new, and I also read the comments where people ask questions or share their experiences."

This showed how customers can easily exchange resources online, making it easier for them to contribute to circularity.

4.1.4.2.3 Facilitating through convenience and digital tools

Facilitating refers to brands' role in enabling customers to seamlessly integrate their resources into circular activities by providing convenient solutions (e.g., through digital tools) which make sustainable actions easier and more intuitive. *Facilitating*'s importance is highlighted by C1's statement, whereby a broader rollout of takeback schemes in stores or providing a prepaid shipping label for returns would increase the likelihood of returning old products for recycling. This underlines the need for brands to develop systems which facilitate customers to resell or recycle their products. A potential mechanism to facilitate customer resource integration is by developing an artificial intelligence (AI)-powered resale assistant, a concept proposed by one of PUMA's partners. This assistant can help guide customers through the resale process. P5 suggested:

"Customers often want to sell their old products but are unsure where to start. An AI-powered assistant could simplify it by analyzing product condition, providing price suggestions, and even handling the listing process for them."

Another suggestion for *facilitating* customer resource integration, coming from a PUMA employee, is a digital sustainability passport. E9 explained:

"The digital passport could transform the customer experience. Imagine scanning a QR code on your shoes to view a complete sustainability profile, from the extent of their recyclability to where you can return them for recycling. This would make circularity so much more actionable."

These digital solutions help overcome customer participation barriers, especially by making sustainable actions more convenient and accessible.

Collectively, *supporting*, *matching*, and *facilitating* practices interact to enable customers to seamlessly integrate their resources into circular initiatives. *Supporting* ensures that the necessary infrastructure and operational resources are available, allowing customers to act on their intentions with ease. *Matching* provides structured opportunities for exchanging tangible resources, such as used products or feedback, thereby connecting customers, brands, and partners in collaborative processes. *Facilitating* lowers participation barriers through convenient digital tools and process simplification, making it easier for customers to act on the knowledge and social motivation gained through other practices. Together, these three practices form an ecosystem wherein customers are equipped, motivated, and guided to meaningfully contribute to circular initiatives, transforming intentions into concrete actions.

4.1.4.3 Customer learning in the CE

4.1.4.3.1 Convincing through innovation

As part of customer learning, *convincing* involves providing customers with the necessary information, insights, and incentives, thereby helping them understand the value of engaging in circularity for their personal values, lifestyles, and needs. However, simply explaining circularity and setting the right conditions for participation is insufficient to *convince* customers. To inspire genuine commitment, customers must experience tangible benefits and practical applications of circular principles. Innovation plays a crucial role here, enabling brands to develop new, attractive, and functional circular products and solutions which

demonstrate circularity's practical advantages to customers. As E12 emphasized, *convincing* customers entails offering an appealing, circular product design and educating on proper recycling:

"It could easily be that circularity is an innovation story. Our innovation teams work closely with our procurement teams to understand the materials available and think about ways to create attractive products that are easier to disassemble, repair, and recycle, or that are biodegradable. […] However, it also includes finding new solutions on eco-friendly packaging with clear instructions for customers on how the packaging can be recycled."

Similarly, P6 highlighted the importance of collaboration to overcome challenges in developing closed-loop solutions: *"It is difficult to find a closed loop solution, so we had to find some partners with additional expertise in this area…"*.

This underscores that *convincing* customers to participate in the CE requires effective and innovative solutions to be developed in collaboration with various business partners.

On the customer side, C7 suggested that *convincing* can be further supported by an innovative digital platform or app where customers can participate in sustainability challenges:

"PUMA could become more innovative in how customers can engage with PUMA and other fans of the brand, for example, through setting up an interactive app, and offering creative sustainability challenges and events."

Finally, E9 discussed how PUMA's retail partners play a significant role in *convincing* customers, suggesting that financial incentives (e.g., discounts) should not be the primary motivator. Instead, discounts could be tied to customer learning: *"Some retailers also work with financial incentives, such as offering discounts when customers return products. I would envision a discount being linked to customers completing sustainability courses, rather than just providing monetary incentives for returns."*

4.1.4.3.2 Entertaining through gamification and incentives as motivational catalyst for learning

To effectively foster customer learning and engagement in circularity, brands must make sustainability fun, interactive, and emotionally rewarding. *Entertaining* acts as a motivational catalyst that enables customer learning by engaging customers in gamified, social experiences. By lowering the cognitive effort required to process information, these enjoyable interactions allow customers to internalize circular principles through positive reinforcement rather than formal instruction. As E6 highlighted, all efforts of PUMA to foster circularity are useless if customers are unwilling to engage. E14 added to this by emphasizing that incentives should not be monetary, as vouchers may controversially encourage overconsumption. Instead, the RE:FIBRE project uses *entertaining* as a motivational catalyst for learning by creating a circular feedback loop that fans can see and touch. Instead of reading about abstract recycling processes, fans participate in a tangible story where their old jersey becomes the professional athlete's new kit.

"We don't rely on vouchers as an incentive to bring back old garments because this would be controversial, as we would encourage the customer to buy more, so we thought about other methods. […] For example, we have a project called RE:FIBRE where we collaborate with the football clubs Manchester City, Borussia Dortmund, AC Milan, and Olympique Marseille. We ask fans to give back their old jerseys that they no longer wear. We then take these polyester products to create new jerseys through chemical recycling, which are then worn by the football players of these clubs."

E10 further elaborated on the RE:FIBRE project by stating that to incentivize fans to return their old garments, PUMA regularly offers them the opportunity to engage in fun experiences, such as a meet and greet with athletes. P3 confirmed that finding new ways to constantly *entertain* customers is vital to lowering cognitive barriers to learning.

"We have to think about new ways of communication and fun elements. […] So we created bins and if people put their old garments in there, then there is a screen on the bin where you can start playing the PAC-Man game and the PAC-Man is collecting waste."

Recognizing that *entertaining* drives customer learning by making circularity socially attractive, E16 emphasized that PUMA's plans to engage with customers are not limited to the RE:FIBRE project or scaling it.

"For example, it would be fun for customers to design their shoes and at the end they get a circularity score based on how durable or dismantlable the product is. […] Further, PUMA could let customers vote for the best design, which will then be produced."

Customers themselves see gamification as a powerful tool for internalizing circular principles. For example, C3 suggested making recycling an interactive challenge: *"Imagine PUMA turning recycling into a game – for example, you return your old gear, and by doing this, you score points. […] It's like leveling up in a video game […], and you're getting tangible rewards for being a sustainability champ. […] Alternatively, what if PUMA had a tree-planting initiative? You hit a certain point threshold, and PUMA plants a tree in your name. That would not result in more consumption but help the planet."*

These examples show how *entertaining* helps customers learn and embed circularity into everyday behaviors by making participation emotionally rewarding rather than a functional chore.

Together, *convincing* and *entertaining* interact within the learning dimension to enhance customer comprehension and engagement with circular practices. *Convincing* provides customers with compelling information, innovative solutions, and practical examples that demonstrate circularity benefits. *Entertaining* complements this by creating enjoyable, gamified, and emotionally rewarding experiences that lower cognitive barriers and strengthen motivation. When combined, these practices ensure that customers not only intellectually

understand circular principles but also internalize them through enjoyable participation, making learning more effective and engagement more sustainable.

Overall, fostering customer engagement in circular activities is a complex process that requires steady interaction between brands and customers. Across the three engagement dimensions, the eight practices interact to create a holistic engagement system. Knowledge sharing equips customers with understanding, resource integration ensures that they can act, and learning fosters internalization and motivation. *Signaling*, *networking*, and *empowering* build the informational and experiential foundation, while *supporting*, *matching*, and *facilitating* provide the means and convenience to participate. Finally, *convincing* and *entertaining* further motivate and reinforce learning, making engagement both comprehensible and enjoyable. Through the coordinated orchestration of these informational, social, practical, and motivational mechanisms, meaningful engagement emerges, embedding circular behaviors and generating sustained value for both customers and the brand.

Importantly, climate relevant outcomes may arise even without explicitly stated climate motivations. Further, stakeholders such as recyclers, retail partners, and strategic circularity partners play a critical role, as circular initiatives would not succeed without their involvement.

4.1.5 Discussion

4.1.5.1 Theoretical contributions

To combat climate change, brands increasingly incentivize customers to engage with more sustainable offerings (Odou & Schill, 2020). While research has explored customer participation in sustainability initiatives (White et al., 2019), a deeper understanding of how brands can actively involve customers in circularity is needed (Mostaghel & Chirumalla, 2021). Recent studies emphasize the importance of customers in the circularity context (Calvo-Porral & Lévy-Mangin, 2020; Frishammar & Parida, 2019). However, they lack a

detailed perspective on how brands can engage with customers in circular activities. We address the research gap by providing insights from PUMA's employees, business partners, and customers about joint circular efforts.

Positioned within the broader climate change engagement context, our findings focus on how customers participate in circular practices such as product returns, repairs, and brand led initiatives rather than capturing climate change as an explicitly articulated motivation. Our key contribution is identifying the engagement practices and mechanisms that enable and sustain customer participation in circular activities. We interpret these practices as the micro-foundations that can engender the emergence of climate change engagement, as they translate abstract sustainability goals into tangible customer behaviors. In this sense, circular customer engagement represents a behavioral pathway through which climate relevant engagement may emerge and scale, while also providing a systematic understanding of the customer's role in circularity and how different engagement practices facilitate their active contribution to circular business models. This is relevant, as engaging with customers on the topic of circularity builds trust, facilitates knowledge sharing, and secures customer support when introducing new circular initiatives, services, and products (Geissdoerfer et al., 2018; Shevchenko et al., 2023).

Therefore, by complementing recent research on critical factors facilitating the CE transition (Bianchini et al., 2019), and customers' acceptance of circular products and processes (Calvo-Porral & Lévy-Mangin, 2020; Mostaghel & Chirumalla, 2021), we provide detailed insights into how brands can engage with customers on circularity. Specifically, we apply the customer engagement framework of Hollebeek et al. (2019) and integrate it with circular practices identified by Verleye et al. (2024). Thus, we respond to Hollebeek et al.'s (2019) research call to empirically test their framework and extend Verleye et al.'s (2024) work by

identifying three additional customer engagement practices: *networking, facilitating,* and *entertaining*.

Incorporating these three additional practices enhances the theoretical understanding of customer engagement in circularity in several ways. First, *networking* highlights the social dimension of circularity, emphasizing how customers learn from and inspire each other in shared spaces both online and offline. This builds on research on collaborative consumption and peer influence in sustainable behavior (Böcker & Meelen, 2017; Ozanne & Ballantine, 2010). Second, *facilitating* underscores the need for brands to reduce engagement barriers by making circular behavior more convenient and accessible. This aligns with research on the role of digital tools and infrastructure in fostering sustainable customer (Langley et al., 2023; Riggs et al., 2024). Finally, *entertaining* introduces the importance of making circularity enjoyable and emotionally engaging for customers, linking it to gamification and experiential marketing studies in sustainability contexts (Bittner & Shipper, 2014; Hamari et al., 2014). These additional practices contribute to a more nuanced understanding of how brands can engage customers in circularity beyond traditional economic incentives or informational approaches.

Finally, this study contributes to the S-D logic by providing micro-level insights into how engagement practices are enacted in sustainability-oriented settings. Specifically, it illustrates how operant resources, such as knowledge, skills, and relationships, are mobilized and integrated through customer engagement. The identified practices show that value is co-created through ongoing interactions among actors rather than being solely embedded in products or services, supporting the core S-D logic axioms. Furthermore, the interplay of knowledge sharing, resource integration, and customer learning practices extends the S-D logic by highlighting how engagement in circular practices can sustain resource integration and relational value creation over time. These findings also provide empirical grounding for

the premise that customer engagement constitutes a mechanism through which social and environmental value can emerge, aligning value co-creation with broader sustainability objectives.

4.1.5.2 Managerial contributions

Integrating customers into the CE requires brands to embrace a multifaceted approach that draws on various practices, and spans the three overarching dimensions of knowledge sharing, resource integration, and customer learning. In the customer knowledge sharing dimension, *signaling* plays a crucial role in establishing trust and transparency, which can be achieved through education on social media, corporate websites, and podcasts. Furthermore, *empowering* customers entails collaborating throughout the product lifecycle, such as in PUMA's RE:SUEDE and RE:FIBRE projects, where customers provide feedback on new circular products and return products for recycling. Finally, *networking* is enabled through interactive workshops and community events, whether it is online through webinars, or offline through hands-on upcycling and sustainable packaging sessions.

On customer resource integration, brands should focus on *facilitating* by offering digital tools that simplify circular participation, such as digital product sustainability passports or AI-powered resale assistants. Second, *supporting* requires collaborations with business partners, including retailers, recyclers, and circular innovation firms. Building relationships with these partners ensures customers have the necessary infrastructure to integrate their resources into circular activities. For instance, providing clear guidance and logistical support for returning products can make it easier for customers to contribute to circular efforts. Third, *matching* involves creating structured opportunities for customers to integrate resources through online reviews, tutorials, or other peer-to-peer content promoting circularity.

In the customer learning dimension, *entertaining* customers through non-monetary incentives and gamification acts as a motivational catalyst for learning. By incorporating fun, interactive

experiences in circularity, brands transform sustainability into an enjoyable challenge. For example, gamifying recycling programs, where customers can earn points or rewards for returning products or engaging in sustainable actions, creates an emotionally rewarding experience that reinforces the internalization of circular principles. This approach triggers learning by lowering cognitive barriers and allowing customers to master sustainable actions through positive reinforcement and social play rather than formal instruction. Finally, *convincing* customers through innovation is crucial, such as by making circular products more appealing and introducing innovative ways of interaction.

Although these practices individually drive engagement, their interplay rather amplifies their impact. Customer knowledge sharing and resource integration jointly foster value co-creation by equipping customers with information and enabling them to act. For example, *signaling*, through transparency about circular efforts, paired with *matching*, such as offering upcycling tutorials, helps customers better understand circular solutions and apply their knowledge through interactive content. Similarly, *networking*, where customers exchange knowledge about circularity in a social and interactive environment, combined with *facilitating* (e.g., convenience-enhancing AI assistants) provides an integrated experience which encourages customers to engage in co-creating circularity with minimal barriers. Additionally, *empowering* customers to provide feedback on design and reuse options, together with *supporting* infrastructure such as clear takeback processes and product tracking, enables them to make informed, sustainable decisions and apply their circular competencies in practice, thereby co-creating value with the brand and other stakeholders.

Next, knowledge sharing and customer learning together drive interpersonal operant resource development. For example, *signaling* via a podcast series on circular fashion paired with *networking* through workshops support knowledge sharing, while gamified challenges under

entertaining support learning. By combining these practices, customers learn about circularity and share this knowledge within their communities.

Finally, customer learning and resource integration foster individual operant resource development. For instance, *convincing* customers through innovative circular products paired with *facilitating* tools like a digital sustainability passport enhances customers' knowledge of the products by providing insights into their features and environmental impact.

Therefore, managers can view circular practices not only as a means to enhance customer participation and value co-creation but also as a pathway for encouraging climate change engagement. These practices help translate brand-led sustainability efforts into customer actions that support broader environmental objectives.

Importantly, while we focus on the apparel industry, the underlying managerial implications are transferable across industries. Any firm with physical or digital products, ranging from consumer electronics to furniture, automotive, or even service ecosystems, can apply these practices to structure customer engagement in circular systems. Crucially, effective circular engagement does not depend on the industry itself, but on how well firms combine complementary practices across knowledge sharing, resource integration, and learning to reduce participation barriers and sustain customer engagement.

From a managerial perspective, this shifts CE strategies from isolated sustainability initiatives to an integrated engagement architecture. Rather than treating circularity as a downstream recycling problem, managers should actively design customer journeys that embed circular practices at multiple touchpoints.

Furthermore, the most effective circular strategies are not driven by single interventions (e.g., only recycling incentives or product transparency), but by reinforcing bundles of practices that jointly shape motivation, capability, and opportunity. Therefore, managers should prioritize cross-functional coordination between marketing, digital product teams, supply

chain, and external partners to ensure that circular engagement is frictionless and behaviorally coherent across channels.

Finally, managerial relevance extends beyond environmental outcomes. By embedding these practices into customer interactions, firms can strengthen brand trust, deepen long-term customer relationships, and build resilience in increasingly resource-constrained markets. Here, circular engagement becomes not only a sustainability lever but also a strategic mechanism for differentiation and customer loyalty creation.

4.1.5.3 Limitations and future research

First, while this study is positioned within the context of climate change engagement, the empirical data did not capture explicit climate-related motivations in participants' accounts. Instead, participants primarily frame their engagement in terms of circular practices. Thus, our findings do not directly demonstrate climate change engagement but rather identify the engagement practices through which such engagement may be enabled.

Second, we conducted our research within a single case study setting, which presents methodological limitations. Although this approach allows for an in-depth exploration of engagement practices within a specific context, it also limits our findings' generalizability. The insights derived may not fully capture variations across engagement platforms, industries, or customer segments. While we are confident that the findings are transferable to other brands, future research should validate and substantiate them with evidence from other brands pursuing circular efforts.

Third, the interviewees were participants in a circular pilot initiative, and therefore, already positively predisposed toward sustainability and circularity. While this selection bias limits the transferability of findings to less engaged or skeptical customer segments, it also reflects a novel and analytically valuable focus. By focusing on highly engaged customers, this study provides relatively rare insights into the practices through which customer engagement for

circularity is enabled. These customers often function as early adopters and catalysts within broader consumption systems. Understanding how their engagement is supported offers important guidance for designing practices which may later be adapted to less engaged segments. Future research can build on this study by examining how the identified practices operate across different engagement intensity levels by longitudinally tracing engagement trajectories or testing the effectiveness of specific practices in mobilizing less engaged customer groups. Comparative studies across brands, industries, or cultural contexts can further refine the boundary conditions under which circular engagement practices support positive climate change engagement. In addition, future research can explore when and how engagement in circular practices becomes explicitly linked to climate change awareness, intentions, and advocacy.

Fourth, our integrative customer engagement framework for circularity was used iteratively during the data analysis stage, rather than fully guiding our interview design from the outset. This abductive approach enabled us to remain open to unexpected insights and avoid leading questions. However, additional targeted questions specifically aligned with the refined theoretical frame were not included in the original interview guide. Specifically, because the interview guide was not pre-structured around every subdimension of the framework, we may have missed opportunities for more granular, targeted probing into specific theoretical categories. Consequently, while our findings provide a robust foundation for understanding emergent circular practices, the depth of certain dimensions remains restricted to participants' insights. Scholars can utilize this integrated framework as a deductive starting point for structured interviews or surveys to more rigorously test and validate the specific relationships between the identified engagement dimensions across diverse circular contexts.

Fifth, future research can complement our findings by examining how brands can engage customers in positive climate change behavior in a real-world context. In particular,

experimental or longitudinal research can unveil the long-term effects of various engagement strategies. Lastly, the role of digital engagement platforms and AI-powered tools in facilitating customer engagement in circularity are promising future research directions.

4.1.6 References

Abu-Bakar, H., Charnley, F., Hopkinson, P., & Morasae, E. K. (2024). Towards a typological framework for circular economy roadmaps: A comprehensive analysis of global adoption strategies. *Journal of Cleaner Production*, *434*, 140066. https://doi.org/10.1016/j.jclepro.2023.140066

Álvarez, I., Expósito, A., Sánchez, D., & Velasco, F. (2026). Closing the loop? Assessing efficiency in advancing circular economy transitions in the EU-27 countries. *Journal of Cleaner Production*, *551*, 147937. https://doi.org/10.1016/j.jclepro.2026.147937

Anderluh, A., Hackl, R., Mesbahi, Z., Pellegrini, T., & Raffler, C. (2025). Consumers' affinity to the circular economy: Empirical evidence utilizing the circular economy cube. *Journal of Cleaner Production*, *525*, 146539. https://doi.org/10.1016/j.jclepro.2025.146539

Bazi, S., Filieri, R., & Gorton, M. (2023). Social media content aesthetic quality and customer engagement: The mediating role of entertainment and impacts on brand love and loyalty. *Journal of Business Research*, *160*, 113778. https://doi.org/10.1016/j.jbusres.2023.113778

Bellezoni, R. A., Adeogun, A. P., Paes, M. X., & Oliveira, J. A. P. de (2022). Tackling climate change through circular economy in cities. *Journal of Cleaner Production*, *381*, 135126. https://doi.org/10.1016/j.jclepro.2022.135126

Bianchini, Rossi, & Pellegrini (2019). Overcoming the Main Barriers of Circular Economy Implementation through a New Visualization Tool for Circular Business Models. *Sustainability*, *11*(23), 6614. https://doi.org/10.3390/su11236614

Bittner, J. V., & Shipper, J. (2014). Motivational effects and age differences of gamification in product advertising. *Journal of Consumer Marketing*, *31*(5), 391–400. https://doi.org/10.1108/jcm-04-2014-0945

Böcker, L., & Meelen, T. (2017). Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation. *Environmental Innovation and Societal Transitions*, *23*, 28–39. https://doi.org/10.1016/j.eist.2016.09.004

Brand, L., Anderski, M., & Ströbel, T. (2025). Unpacking brand co-creation: a single-case study and empirical consolidation of brand co-creation performances following qualitative meta-synthesis. *Journal of Brand Management*, *32*(2), 150–165. https://doi.org/10.1057/s41262-024-00374-9

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer Engagement. *Journal of Service Research*, *14*(3), 252–271. https://doi.org/10.1177/1094670511411703

Castro, C. G., Trevisan, A. H., Pigosso, D. C., & Mascarenhas, J. (2022). The rebound effect of circular economy: Definitions, mechanisms and a research agenda. *Journal of Cleaner Production*, *345*, 131136. https://doi.org/10.1016/j.jclepro.2022.131136

Castro-Lopez, A., Iglesias, V., & Santos-Vijande, M. L. (2023). Organizational capabilities and institutional pressures in the adoption of circular economy. *Journal of Business Research*, *161*, 113823. https://doi.org/10.1016/j.jbusres.2023.113823

Cavaye, A. (1996). Case study research: A multi-faceted research approach for IS. *Information Systems Journal*, *6*(3), 227–242. https://doi.org/10.1111/j.1365-2575.1996.tb00015.x

Chandler, J. D., & Lusch, R. F. (2015). Service Systems. *Journal of Service Research*, *18*(1), 6–22. https://doi.org/10.1177/1094670514537709

Chowdhury, S., Dey, P. K., Rodríguez-Espíndola, O., Parkes, G., Tuyet, N. T. A., Long, D. D., & Ha, T. P. (2022). Impact of Organisational Factors on the Circular Economy Practices and Sustainable Performance of Small and Medium-sized Enterprises in Vietnam. *Journal of Business Research*, *147*, 362–378. https://doi.org/10.1016/j.jbusres.2022.03.077

Chuah, S. H.-W., El-Manstrly, D., Tseng, M.-L., & Ramayah, T. (2020). Sustaining customer engagement behavior through corporate social responsibility: The roles of environmental concern and green trust. *Journal of Cleaner Production*, *262*, 121348. https://doi.org/10.1016/j.jclepro.2020.121348

Cohen, J. (1960). A Coefficient of Agreement for Nominal Scales. *Educational and Psychological Measurement*, *20*(1), 37–46. https://doi.org/10.1177/001316446002000104

Cohen, J. (1968). Weighted kappa: Nominal scale agreement with provision for scaled disagreement or partial credit. *Psychological Bulletin*, *70*(4), 213–220. https://doi.org/10.1037/h0026256

Dubois, A., & Gadde, L.-E. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research*, *55*(7), 553–560. https://doi.org/10.1016/s0148-2963(00)00195-8

Felice, F. de, Fareed, A. G., Zahid, A., Nenni, M. E., & Petrillo, A. (2025). Circular economy practices in the textile industry for sustainable future: A systematic literature review. *Journal of Cleaner Production*, *486*, 144547. https://doi.org/10.1016/j.jclepro.2024.144547

Frishammar, J., & Parida, V. (2019). Circular Business Model Transformation: A Roadmap for Incumbent Firms. *California Management Review*, *61*(2), 5–29. https://doi.org/10.1177/0008125618811926

Gallego-Schmid, A., Vásquez-Ibarra, L., Guerrero, A. B., Henninger, C. E., & Rebolledo-Leiva, R. (2025). Circular economy in a recently transitioned high-income country in Latin America and the Caribbean: Barriers, drivers, strengths, opportunities, key stakeholders and priorities in Chile. *Journal of Cleaner Production*, *486*, 144429. https://doi.org/10.1016/j.jclepro.2024.144429

Geissdoerfer, M., Morioka, S. N., Carvalho, M. M. de, & Evans, S. (2018). Business models and supply chains for the circular economy. *Journal of Cleaner Production*, *190*, 712–721. https://doi.org/10.1016/j.jclepro.2018.04.159

Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, *114*, 11–32. https://doi.org/10.1016/j.jclepro.2015.09.007

Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does Gamification Work? -- A Literature Review of Empirical Studies on Gamification. In *2014 47th Hawaii International Conference on System Sciences* (pp. 3025–3034). IEEE. https://doi.org/10.1109/hicss.2014.377

Hetherington, J. B., Loch, A. J., Juliano, P., & Umberger, W. J. (2024). Barriers to circular economy adoption are diverse and some are business-model specific: Evidence from the Australian cheese manufacturing sector. *Journal of Cleaner Production*, *477*, 143879. https://doi.org/10.1016/j.jclepro.2024.143879

Ho, H., & Ganesan, S. (2013). Does Knowledge Base Compatibility Help or Hurt Knowledge Sharing between Suppliers in Coopetition? the Role of Customer Participation. *Journal of Marketing*, *77*(6), 91–107. https://doi.org/10.1509/jm.11.0570

Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*, *28*(2), 149–165. https://doi.org/10.1016/j.intmar.2013.12.002

Hollebeek, L. D., Sprott, D. E., Sigurdsson, V., & Clark, M. K. (2021). Social influence and stakeholder engagement behavior conformity, compliance, and reactance. *Psychology & Marketing*, *39*(1), 90–100. https://doi.org/10.1002/mar.21577

Hollebeek, L. D., Srivastava, R. K., & Chen, T. (2019). S-D logic–informed customer engagement: Integrative framework, revised fundamental propositions, and application to CRM. *Journal of the Academy of Marketing Science*, *47*(1), 161–185. https://doi.org/10.1007/s11747-016-0494-5

Jaakkola, E., & Alexander, M. (2014). The Role of Customer Engagement Behavior in Value Co-Creation. *Journal of Service Research*, *17*(3), 247–261. https://doi.org/10.1177/1094670514529187

Kazeminia, A., Hultman, M., & Mostaghel, R. (2016). Why pay more for sustainable services? The case of ecotourism. *Journal of Business Research*, *69*(11), 4992–4997. https://doi.org/10.1016/j.jbusres.2016.04.069

Köcher, S [Sören], Alkire, L., Köcher, S [Sarah], Myrden, S., & O'Connor, G. E. (2025). Consumers' climate change engagement: Conceptualization, scale development, and assessment. *Journal of Business Research*, *199*, 115568. https://doi.org/10.1016/j.jbusres.2025.115568

Langley, D. J., Rosca, E., Angelopoulos, M., Kamminga, O., & Hooijer, C. (2023). Orchestrating a smart circular economy: Guiding principles for digital product passports. *Journal of Business Research*, *169*, 114259. https://doi.org/10.1016/j.jbusres.2023.114259

Le Ha, T. (2025). Does Circularity Transformation Hinder Climate Risk? A New Insight from European Countries. *Circular Economy and Sustainability*, *5*(4), 2873–2899. https://doi.org/10.1007/s43615-025-00521-7

Leal Filho, W., Frizzo, K., Eustachio, J. H. P. P., Tsani, S., & Özuyar, P. G. (2024). Integrating climate change practices in a circular economy context—The perspective from chemical enterprises. *Sustainable Development*, *32*(3), 2489–2505. https://doi.org/10.1002/sd.2796

Lieder, M., & Rashid, A. (2016). Towards circular economy implementation: a comprehensive review in context of manufacturing industry. *Journal of Cleaner Production*(115), 36–51. https://www.sciencedirect.com/science/article/pii/s0959652615018661?casa_token=acp-bugjv88aaaaa:b9jrm911re_k2r_kmtbmlshxzy-4raho62yshan1fv20uwkewu0duxzjvrpoaphqy2og_t1mtw

Liu, M., & Zhang, X. (2026). Waste not, emit not: How circular economy strategies shape climate and growth outcomes in G-20 nations? *Journal of Cleaner Production*, *540*, 147415. https://doi.org/10.1016/j.jclepro.2025.147415

MacLean, L. M., Meyer, M., & Estable, A. (2004). Improving accuracy of transcripts in qualitative research. *Qualitative Health Research*, *14*(1), 113–123. https://doi.org/10.1177/1049732303259804

McCracken, G. D. (1988). *The long interview* (12. ed.). *Quantitative research methods: Vol. 13*. SAGE Publications.

Mena, J. A., & Chabowski, B. R. (2015). The role of organizational learning in stakeholder marketing. *Journal of the Academy of Marketing Science*, *43*(4), 429–452. https://doi.org/10.1007/s11747-015-0442-9

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). SAGE Publications.

Mishra, S., Jain, S., & Malhotra, G. (2021). The anatomy of circular economy transition in the fashion industry. *Social Responsibility Journal*, *17*(4), 524–542. https://doi.org/10.1108/SRJ-06-2019-0216

Mostaghel, R., & Chirumalla, K. (2021). Role of customers in circular business models. *Journal of Business Research*, *127*, 35–44. https://doi.org/10.1016/j.jbusres.2020.12.053

Odou, P., & Schill, M. (2020). How anticipated emotions shape behavioral intentions to fight climate change. *Journal of Business Research*, *121*, 243–253. https://doi.org/10.1016/j.jbusres.2020.08.047

Ozanne, L. K., & Ballantine, P. W. (2010). Sharing as a form of anti-consumption? An examination of toy library users. *Journal of Consumer Behaviour*, *9*(6), 485–498. https://doi.org/10.1002/cb.334

Pal, R., & Gander, J. (2018). Modelling environmental value: An examination of sustainable business models within the fashion industry. *Journal of Cleaner Production*, *184*, 251–263. https://doi.org/10.1016/j.jclepro.2018.02.001

Patwa, N., Sivarajah, U., Seetharaman, A., Sarkar, S., Maiti, K., & Hingorani, K. (2021). Towards a circular economy: An emerging economies context. *Journal of Business Research*, *122*, 725–735. https://doi.org/10.1016/j.jbusres.2020.05.015

Pucci, T., Casprini, E., Galati, A., & Zanni, L. (2020). The virtuous cycle of stakeholder engagement in developing a sustainability culture: Salcheto winery. *Journal of Business Research*, *119*, 364–376. https://doi.org/10.1016/j.jbusres.2018.11.009

Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, *8*(3), 238–264. https://doi.org/10.1108/11766091111162070

Quintelier, K. J., van Bommel, K., van Erkelens, A. M., & Wempe, J. (2023). People at the heart of circularity: A mixed methods study about trade-offs, synergies, and strategies related to circular and social organizing. *Journal of Cleaner Production*, *387*, 135780. https://doi.org/10.1016/j.jclepro.2022.135780

Ranjan, K. R., & Read, S. (2016). Value co-creation: Concept and measurement. *Journal of the Academy of Marketing Science*, *44*(3), 290–315. https://doi.org/10.1007/s11747-014-0397-2

Re, B., & Magnani, G. (2022). Value co-creation in circular entrepreneurship: An exploratory study on born circular SMEs. *Journal of Business Research*, *147*, 189–207. https://doi.org/10.1016/j.jbusres.2022.03.090

Reckwitz, A. (2002). Toward a Theory of Social Practices. *European Journal of Social Theory*, *5*(2), 243–263. https://doi.org/10.1177/13684310222225432

Riggs, R., Felipe, C. M., Roldán, J. L., & Real, J. C. (2024). Information systems capabilities value creation through circular economy practices in uncertain environments: A conditional mediation model. *Journal of Business Research*, *175*, 114526. https://doi.org/10.1016/j.jbusres.2024.114526

Roy, S. K., Shekhar, V., Quazi, A., & Quaddus, M. (2020). Consumer engagement behaviors: do service convenience and organizational characteristics matter? *Journal of Service Theory and Practice*, *30*(2), 195–232. https://doi.org/10.1108/JSTP-03-2018-0049

Salmi, A., & Kaipia, R. (2022). Implementing circular business models in the textile and clothing industry. *Journal of Cleaner Production*, *378*, 134492. https://doi.org/10.1016/j.jclepro.2022.134492

Schau, H. J., Muñiz, A. M., & Arnould, E. J. (2009). How Brand Community Practices Create Value. *Journal of Marketing*, *73*(5), 30–51. https://doi.org/10.1509/jmkg.73.5.30

Schiaroli, V., Fraccascia, L., & Dangelico, R. M. (2024). How can consumers behave sustainably in the fashion industry? A systematic literature review of determinants, drivers, and barriers across the consumption phases. *Journal of Cleaner Production*, *483*, 144232. https://doi.org/10.1016/j.jclepro.2024.144232

Schill, M., & Fosse-Gomez, M.-H. (2025). Consumer climate change engagement in fostering well-being and mitigation behaviors. *Journal of Business Research*, *198*, 115490. https://doi.org/10.1016/j.jbusres.2025.115490

Schwanholz, J., & Leipold, S. (2020). Sharing for a circular economy? An analysis of digital sharing platforms' principles and business models. *Journal of Cleaner Production*, *269*, 122327. https://doi.org/10.1016/j.jclepro.2020.122327

Shashi, Centobelli, P., Cerchione, R., & Jhamb, D. (2024). What makes people hesitant from circularity: An analysis of risk, marketing mix, cost and inconvenience. *Journal of Consumer Behaviour*, *23*(1), 43–60. https://doi.org/10.1002/cb.2143

Shevchenko, T., Saidani, M., Ranjbari, M., Kronenberg, J., Danko, Y., & Laitala, K. (2023). Consumer behavior in the circular economy: Developing a product-centric framework. *Journal of Cleaner Production*, *384*, 135568. https://doi.org/10.1016/j.jclepro.2022.135568

Skålén, P., Gummerus, J., Koskull, C. von, & Magnusson, P. R. (2015). Exploring value propositions and service innovation: a service-dominant logic study. *Journal of the Academy of Marketing Science*, *43*(2), 137–158. https://doi.org/10.1007/s11747-013-0365-2

Spiggle, S. (1994). Analysis and Interpretation of Qualitative Data in Consumer Research. *Journal of Consumer Research*, *21*(3), 491. https://doi.org/10.1086/209413

Suresh, J., Agarwal, V., Janardhanan, M., & Saikouk, T. (2024). Unlocking sustainability: Overcoming barriers to circular economy implementation in warehouse fulfilment centers. *Journal of Cleaner Production*, *485*, 144391. https://doi.org/10.1016/j.jclepro.2024.144391

UN. (2023). *The Sustainable Development Goals Report: Special Edition.* United Nations. http://unstats.un.org/sdgs/report/2023/The-Sustainable-Development-Goals-Report-2023.pdf

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, *68*(1), 1–17. https://doi.org/10.1509/jmkg.68.1.1.24036

Vargo, S. L., & Lusch, R. F. (2008). From goods to service(s): Divergences and convergences of logics. *Industrial Marketing Management*, *37*(3), 254–259. https://doi.org/10.1016/j.indmarman.2007.07.004

Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: An extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, *44*(1), 5–23. https://doi.org/10.1007/s11747-015-0456-3

Verleye, K., Keyser, A. de, Raassens, N., Alblas, A. A., Lit, F. C., & Huijben, J. C. C. M. (2024). Pushing Forward the Transition to a Circular Economy by Adopting an Actor Engagement Lens. *Journal of Service Research*, *27*(1), 69–88. https://doi.org/10.1177/10946705231175937

Wannow, S., & Haupt, M. (2026). Explaining consumer climate engagement: a conceptual model and a typology based on social exchange and construal level theory. *Journal of Business Research*, *207*, 115970. https://doi.org/10.1016/j.jbusres.2026.115970

White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT Consumer Behaviors to be More Sustainable: A Literature Review and Guiding Framework. *Journal of Marketing*, *83*(3), 22–49. https://doi.org/10.1177/0022242919825649

Yin, R. K. (2014). *Case study research: Design and methods (applied social research methods)* (5th ed.). SAGE Publications.

Zhou, Z., Zheng, F., Lin, J., & Zhou, N. (2021). The interplay among green brand knowledge, expected eudaimonic well-being and environmental consciousness on green brand purchase intention. *Corporate Social Responsibility and Environmental Management*, *28*(2), 630–639. https://doi.org/10.1002/csr.2075

Zhu, B., Nguyen, M., Sarm Siri, N., & Malik, A. (2022). Towards a transformative model of circular economy for SMEs. *Journal of Business Research*, *144*, 545–555. https://doi.org/10.1016/j.jbusres.2022.01.093

4.1.7 Appendix

Table 4.1-1: Interview participants

Code	Type	Role
E1	PUMA employee	Product Line Manager Sportstyle Footwear
E2	PUMA employee	Senior Sustainability Manager
E3	PUMA employee	Lead Product Line Manager Sportstyle Apparel
E4	PUMA employee	Head of Global Go to Market Merchandising for Basketball, Motorsport & Accessories
E5	PUMA employee	Director Global Innovation Apparel & Accessories
E6	PUMA employee	Senior Manager Material Design & Innovation
E7	PUMA employee	Junior Project Manager Team Sports
E8	PUMA employee	Senior Manager Material Engineering Innovation
E9	PUMA employee	Sustainability & Tech Manager Sportstyle Apparel
E10	PUMA employee	Senior Product Line Manager Team Sports
E11	PUMA employee	Manager Materials Footwear
E12	PUMA employee	ESG Analyst
E13	PUMA employee	Senior Manager Corporate Strategy
E14	PUMA employee	Senior Head of Corporate Sustainability
E15	PUMA employee	Junior Product Line Manager Apparel
E16	PUMA employee	Sustainability Analyst
P1	Retail Partner	Product Manager
P2	Recycling Partner	Manager Materials & Innovation
P3	Recycling Partner	Manager Sustainability & Communications
P4	Consulting Partner	CEO
P5	Consulting Partner	Senior Strategist
P6	Consulting Partner	Sustainability Manager
C1-C9	Customer	Engaged PUMA customers participating in the RE:SUEDE project

Interview guide

The purpose of the interviews is to better understand the efforts of Puma, its business partners and its consumers in the context of circularity. Circularity means recycling and reusing materials to reduce waste. It entails setting up product takeback schemes, reducing production waste to landfills and developing recycled materials as alternatives to conventional ones.

Employees

1. ***Status quo***
   - Can you please provide a short summary of Puma's circularity strategy?
     - Do you have an example of current circularity efforts at Puma that you can describe in more detail?
     - What are the benefits for Puma to increase efforts on circularity?
     - How does circularity contribute to your business goals?
   - How do you interact with your customers on circular activities?
     - How do you educate your customers on the benefits of circularity?
     - How can customers currently participate in the process of circularity and how do you explain it to them?
   - How do you interact with business partners on the topic of circularity?

2. ***Forward looking vision***
   - How would you envision circularity at Puma in the future?
     - What are challenges to achieve circular loops?
     - How could you engage and involve customers more on the topic of circularity?
     - How can you further improve the collaboration with business partners?
   - How could circularity contribute to Puma's business goals going forward?
     - How could circularity contribute to Puma's brand perception and increased green product purchases?
     - How would you assess the importance to understand better how circularity can contribute to (1) Puma's brand perception and (2) actual purchases of green products and why?
   - What are in your opinion critical success factors for a working circular business model?

3. ***The role of digital platforms***
   - How do you currently use digital platforms (i.e. your website and social media) to interact with customers and partners on circularity?
   - How could you use digital platforms in the future to stimulate circularity?
     - What would be the underlying structure of this digital platform?
     - What features would be relevant for such a platform?
   - How could you increase interaction on circularity with customers and business partners through digital platforms?
   - How could you drive adoption of circularity through your website and/or social media?
   - What are potential blockers of leveraging digital platforms for circularity?

Consumers

1. ***Status quo***
   - How important is the topic of circularity for you and why?
   - How do you perceive the current circularity efforts of Puma? Please explain.
     - What do you think is well done by Puma regarding their circularity efforts?
     - What do you think is currently missing in the circularity efforts of Puma?
   - How do you interact with Puma on the topic of circularity?
   - Do you have a clear understanding of how you can contribute to the circularity efforts of Puma?

2. ***Forward looking vision***
   - How do you envision Puma's engagement in circularity in the future?
   - How would you like to be informed about Puma's circularity offerings?
   - What would be relevant factors that would encourage you to engage more with Puma on circularity?
     - How could Puma involve you more in the process of circularity?
     - How could Puma make it easier for you to contribute to circularity?

3. ***The role of digital platforms***
   1. How should Puma use digital platforms, such as their website or social media, to engage with you about circularity?
      - How would you envision interaction with Puma on circularity through digital platforms?
   2. How could Puma's social media encourage you to engage more in circular efforts?
      - What type of content on social media would encourage you to engage in circularity?
      - How relevant would it be to involve athletes in the content?
   3. What do you think about a section on Puma's website where you can engage with Puma on sustainable and circular activities?
      - What activities could you think of that would be interesting for you?
      - How important would it be for you to get rewards for your efforts and why?
      - How could such a reward look like?

Business Partners

1. ***Status quo***
   - How do you contribute to circularity?
     - What is your field of expertise when it comes to circularity?
     - Can you please describe your activities on the topic of circularity?
     - How does circularity contribute to reaching your business goals?
   - How do you interact with Puma on the topic of circularity?
     - Can you please share in some detail one example where you collaborated with Puma?
     - How do you benefit from collaborating with Puma on circularity?
   - What are currently challenges to achieve circular loops?

2. ***Forward looking vision***
   - How would you envision circularity going forward?
     - Is there anything that requires improvement and if so, what?
     - What are you currently working on to improve the process of circularity?
     - Are there specific company milestones you would like to reach and if so, which are they and how do you reach them?
   - How could the current circularity engagement with Puma be improved?
     - How could the interaction with Puma become more effective?
   - Do you collaborate with other companies and if so, is there anything you find particularly useful in the context of circularity?
     - How could the knowledge from cooperations with other companies be transferred and applied to the relationship with Puma?
   - What are critical success factors that must be fulfilled to enable effective circular processes?

3. ***The role of digital platforms***
   - Do you currently use digital platforms for the purpose of circularity and if so, which and how?
     - Do you engage with customers via social media and if so, how?
     - Do you allow interaction with partners/customers through your website?
   - How could digital platforms improve the interaction between Puma, customers and you on circularity?
   - How could you use digital platforms to stimulate circular activities?
   - What are potential blockers of leveraging digital platforms for engaging customers on circularity?
   - How could you set up a digital platform that would help to stimulate circularity and engage with partners and customers?
     - What would be the underlying idea of how this platform would be structured?
     - What features would be relevant for such a platform?

4.2 Markenstrategien zum Aufbau einer Kreislaufwirtschaft: Die Relevanz der Wert-Kokreation verschiedener Akteure am Beispiel ausgewählter Fashion-Marken (Book Chapter)

Authors Frederic Dreher, University of Bayreuth, Germany

Prof. Dr. Tim Ströbel, University of Bayreuth, Germany

Accepted in Dreher, F., & Ströbel, T. (2027). Markenstrategien zum Aufbau einer Kreislaufwirtschaft: Die Relevanz der Wert-Kokreation verschiedener Akteure am Beispiel ausgewählter Fashion-Marken, In: Schunk, H., Könecke, T. & Kilian, K. (Hrsg.), Marken und Nachhaltigkeit: Aktuelle Entwicklungen und Trends. *Springer Gabler,* Wiesbaden. 978-3658517618

Reproduced with permission from Springer Nature.

ZUSAMMENFASSUNG

Die Kreislaufwirtschaft bietet ein alternatives Wirtschaftssystem, das Ressourcen durch Wiederverwendung, Recycling und längere Produktlebenszyklen erhält. Dieser Beitrag zeigt, wie Marken durch Wert Ko-Kreation verschiedener Akteure den Übergang zur Kreislaufwirtschaft gestalten können, basierend auf Fallstudien der Fashion-Marken PUMA, Patagonia und H&M. Die Erkenntnisse zeigen, dass die Entwicklung langlebiger Designs, Rücknahmeprogramme, Materialinnovationen, transparente Kommunikation sowie das Engagement verschiedener Akteure entscheidend sind, um zirkuläre Ansätze nachhaltig zu etablieren. Der Beitrag liefert praxisnahe Einblicke in erfolgreiche Markenstrategien, indem er die Kollaboration zwischen Marken, Kunden und anderen relevanten Akteuren als Schlüssel zur Umsetzung zirkulärer Geschäftsmodelle beschreibt.

Schlüsselwörter : *Kreislaufwirtschaft, Nachhaltigkeit, Markenstrategien, Wert-Kokreation*

4.2.1 Einleitung

Umweltprobleme, wie der fortschreitende Verlust der Biodiversität, die Verschmutzung von Wasser, Boden und Luft sowie eine kontinuierlich steigende Ressourcenverknappung, haben in den letzten Jahren den Ruf nach mehr Nachhaltigkeit verstärkt (Geissdoerfer et al., 2017; Johansson & Henriksson, 2020). Insbesondere der weiter wachsende menschliche Konsum, einer der wesentlichen Treiber des globalen Wirtschaftswachstums, steigert die Nachfrage nach natürlichen Ressourcen in einem Ausmaß, dass das gesamte Ökosystem unseres Planeten zunehmend aus dem Gleichgewicht gerät (Giannetti et al., 2023). Um dieser negativen Entwicklung entgegenzuwirken, beschäftigen sich unter anderem die Politik, wissenschaftliche Institutionen und Wirtschaftsunternehmen seit längerem mit Möglichkeiten, den Lebenszyklus natürlicher Ressourcen durch innovative Technologien, angepasste Geschäftsmodelle und neue Verordnungen zu verlängern (Cheung et al., 2015; Mou et al., 2021).

Maßnahmen zur Einsparung, effizienteren Nutzung und Rückgewinnung von Ressourcen werden unter dem Begriff der Kreislaufwirtschaft zusammengefasst (Haines-Gadd et al., 2021). Die Kreislaufwirtschaft ist ein Wirtschaftssystem, das die negativen Umweltauswirkungen der linearen Einwegwirtschaft verringert, indem Ressourcen, Materialien und Produkte im Produktions- und Konsumzyklus wiederverwendet, recycelt, reduziert und zurückgewonnen werden (Kirchherr et al., 2017; Korhonen et al., 2018). Da die Kreislaufwirtschaft darauf abzielt, Ressourcen möglichst lange auf ihrem höchsten Nutzwert zu halten, ermöglicht sie es Unternehmen, Wirtschaftswachstum von Klimaveränderungen zu entkoppeln, indem Abfälle minimiert, eine saubere Produktion gefördert und die Lebensdauer von Produkten verlängert wird (Frishammar & Parida, 2019; Giannetti et al., 2023). Obwohl die Idee einer Kreislaufwirtschaft nicht neu ist und bis in die späten 1970er Jahre zurückreicht, haben insbesondere Unternehmen im Rahmen ihrer Markenstrategien erst kürzlich begonnen,

dem Thema mehr Aufmerksamkeit zu schenken (Mostaghel & Chirumalla, 2021; Rajput & Singh, 2020). Dabei rücken insbesondere Fashion-Marken zunehmend in den Fokus, da die Modeindustrie zu den ressourcenintensivsten Branchen zählt und gleichzeitig eine hohe Sichtbarkeit im öffentlichen Diskurs über Nachhaltigkeit aufweist (Dissanayake & Weerasinghe, 2022; Pal & Gander, 2018). Ihr hoher ökologischer Fußabdruck, etwa durch wasserintensive Produktionsprozesse, den Einsatz umweltschädlicher Chemikalien und kurze Produktlebenszyklen aufgrund der Schnelllebigkeit von Modetrends, macht sie zu einem zentralen Handlungsfeld für nachhaltige Transformation (Bick et al., 2018).

Inzwischen ist der Aufbau einer Kreislaufwirtschaft daher zu einem wesentlichen Bestandteil vieler Markenstrategien in der Modeindustrie geworden, doch die Umsetzung bleibt in vielen Fällen eine große Herausforderung (Kirchherr et al., 2018; Murray et al., 2017). Während sich die Forschung zur Kreislaufwirtschaft bereits mit letzterem Beitrag zur Nachhaltigkeit, möglichen Geschäftsmodellen und der Relevanz von technologischem Fortschritt beschäftigt hat (Bocken & Ritala, 2022; Boukhatmi et al., 2023; Geissdoerfer et al., 2018; Rajput & Singh, 2020), fehlt Unternehmen weiterhin ein klares Verständnis, wie sie ihre zirkuläre Markenstrategie in direktem Zusammenwirken und Austausch mit relevanten Akteuren realisieren können (Mostaghel & Chirumalla, 2021; Re et al., 2021). Entsprechend wird in diesem Beitrag anhand von Fallstudien aus der Modeindustrie beleuchtet, wie Fashion-Marken den Aufbau einer Kreislaufwirtschaft angehen können und welche Rolle die verschiedenen Akteure hierbei spielen.

4.2.2 Relevanz der Wert-Kokreation in einer Kreislaufwirtschaft

In den letzten Jahren hat das Thema Nachhaltigkeit bei Marken aufgrund des zunehmenden gesellschaftlichen und politischen Drucks an Relevanz gewonnen (Bansal & Roth, 2000; Hahn et al., 2015). Im Rahmen des Konzepts der gemeinsamen Wertschöpfung sind insbesondere Kunden zu aktiven Ressourcenintegratoren geworden und drängen auf

soziale und umweltfreundliche Maßnahmen (Hansen et al., 2022; Pucci et al., 2020). Ein Unternehmen, das positive Verhaltensänderungen fördern und zum Gemeinwohl beitragen möchte, muss daher ein Umfeld schaffen, in dem sich interessierte Akteure sowohl mit der Marke als auch untereinander im Sinne eines nachhaltigen Verhaltens austauschen können (Chuah et al., 2020; Pucci et al., 2020). Dieser Prozess, durch den Produkte, Dienstleistungen und Erlebnisse gemeinsam von Marken und beteiligten Akteuren geschaffen werden, wird gemeinhin als Wert-Kokreation verstanden (Ramaswamy, 2009).

Ein zentraler Fokus von Unternehmen liegt in diesem Zusammenhang auf der Kreislaufwirtschaft (Geissdoerfer et al., 2017). Da ein zirkuläres Ökosystem die Marke selbst, aber auch Zulieferer, Kunden, Geschäftspartner, Forschungseinrichtungen, Universitäten und öffentliche Institutionen umfasst, ist die Schaffung eines Umfelds, in dem eine gemeinsame Wertschöpfung zwischen den verschiedenen Akteuren stattfinden kann, eine wesentliche Voraussetzung (Mostaghel & Chirumalla, 2021). Die Umsetzung einer Kreislaufwirtschaft ist daher eine komplexe Aufgabe, die die Kooperation vieler Akteure, insbesondere der Kunden, erfordert (Urbinati et al., 2017). Durch die gemeinsame Umsetzung zirkulärer Praktiken kann die Lebensdauer von Produkten und Materialien verlängert werden, was zu ökologischen, sozialen und wirtschaftlichen Vorteilen führt (Frishammar & Parida, 2019). Beispielsweise haben Unternehmen angefangen, Rücknahmesysteme für wiederverwertbare Materialien zu etablieren, Upcycling Ideen zu kommunizieren, oder an der Langlebigkeit ihrer Produkte zu arbeiten (Bakker et al., 2014; Tukker, 2015). Aufgrund der zahlreichen Interdependenzen mit verschiedenen Akteuren haben Marken jedoch häufig Probleme ihre Vorstellungen einer Kreislaufwirtschaft effektiv und skalierbar in die Praxis umzusetzen (Re et al., 2021; Zucchella & Previtali, 2019). Entsprechend erfordert die Einhaltung der Prinzipien einer Kreislaufwirtschaft eine Transformation des Geschäftsmodells (Frishammar & Parida, 2019). Diese Transformation ist äußerst anspruchsvoll, da die Umsetzung kreislauforientierter

Aktivitäten ein Unternehmen dazu zwingt, die Art und Weise, wie es Wert schafft, liefert und erfasst, zu verändern (Lewandowski, 2016). In diesem Zusammenhang können Geschäftsmodelle, die sich auf den Aufbau einer Kreislaufwirtschaft konzentrieren, als nachhaltige Geschäftsmodelle definiert werden, die auf Lösungen für nachhaltige Entwicklung abzielen, indem sie durch das proaktive Management mehrerer Akteure zusätzlichen monetären und nicht-monetären Wert schaffen und eine langfristige Perspektive einnehmen (Geissdoerfer et al., 2018, p. 713).

Insbesondere der Aufbau enger Beziehungen mit den beteiligten Akteuren stellt hierbei regelmäßig eine Herausforderung für Marken dar, da die jeweiligen Bedürfnisse erkannt und erfüllt werden müssen (Re & Magnani, 2023; Re et al., 2021). Vor allem Kunden müssen für die Wiederverwertung von Ressourcen begeistert werden, da die Einstellung dieser entscheidend für den Erfolg eines kreislauforientierten Geschäftsmodells ist (Mostaghel & Chirumalla, 2021). Gleichzeitig müssen Unternehmensaktivitäten glaubhaft erscheinen und Kunden erwarten zuverlässige Informationen über deren Hintergrund und Auswirkungen (Lewandowska et al., 2017). Somit ist der Übergang zu einem kreislauforientierten Geschäftsmodell ein entdeckungsorientierter Prozess, der sich durch Experimentieren, Irrtum, Lernen und Iteration auszeichnet (Frishammar & Parida, 2019).

Im Folgenden werden die Fallbeispiele PUMA, H&M und Patagonia näher betrachtet, da diese Unternehmen als etablierte Größen in der Textil- und Sportbekleidungsbranche innovative Ansätze zur Umsetzung der Kreislaufwirtschaft verfolgen. Entsprechend bietet deren Analyse wertvolle Einblicke in die praktische Umsetzung zirkulärer Geschäftsmodelle, die Integration verschiedener Akteure sowie die Bewältigung von Herausforderungen.

4.2.3 Fallstudien ausgewählter Fashion-Marken

4.2.3.1 PUMA

Mit der Einführung des Circular Lab hat PUMA ein Innovationszentrum geschaffen, in dem sie mit Kunden und Geschäftspartnern über Kreislaufwirtschaft sprechen und gemeinsam an Fortschritten arbeiten können. Unter anderem entstand im Rahmen des Circular Lab ein innovatives Projekt namens RE:SUEDE, in dem PUMA gemeinsam mit Partnern aus der Recyclingindustrie und der Materialforschung einen vollständig biologisch abbaubaren Schuh entwickelt hat (PUMA, 2024c). In diesem Projekt wurden 500 Kunden von PUMA aktiv involviert, die den neuen Schuh testen und Feedback geben durften, was zu einer Verbesserung des Tragekomforts zukünftiger Versionen des Schuhs geführt hat (sneaker.de, 2024). Zudem konnte PUMA durch die Einbindung der 500 Teilnehmer wertvolle Informationen darüber gewinnen, ob das Produkt im Verkauf funktionieren würde. Insgesamt bestätigten 68% der Teilnehmer, dass sie den Schuh in ihrem Freundes-, Verwandten- und Bekanntenkreis weiterempfehlen würden, was dazu beitrug, dass PUMA zusammen mit seinen Geschäftspartnern die Weiterentwicklung des Schuhs fortsetzte und ankündigte, den RE:SUEDE 2.0 auf den Markt zu bringen (TextilWirtschaft, 2024).

Ein weiteres Projekt, das Teil des Circular Lab ist, heißt RE:FIBRE. Dieses fokussiert sich auf die Umwandlung von Textilabfällen und anderen gebrauchten Materialien in neue Textilien (Kunststoffe, 2023). Auch hier arbeitet PUMA mit Reyclingunternehmen und Sportklubs zusammen. Insbesondere werden mit Beginn der Fußballsaison 24/25 erstmals alle offiziellen Fußballtrikots der 35 von PUMA ausgestatteten Klubs aus RE:FIBRE hergestellt sein, womit mehr als drei Millionen Kleidungsstücke im Sinne der Kreislaufwirtschaft produziert wurden (PUMA, 2024a). Kunden von PUMA und Fans der Fußballklubs nehmen bei diesem Projekt ebenfalls eine zentrale Rolle ein, denn das Konzept der Kreislaufwirtschaft kann nur funktionieren, wenn ausreichend alte Materialien für die Herstellung der RE:SUEDE

Trikots zurückgegeben werden. Entsprechend arbeitet PUMA gemeinsam mit Partnern, wie 11Teamsports, an dem Ausbau von Rückgabesystemen (11Teamsports, 2024). Um Kunden zu motivieren, ihren Beitrag zu einer funktionierenden Kreislaufwirtschaft zu leisten, bietet PUMA in Zusammenarbeit mit den Fußballklubs beispielsweise auch Fanevents an, bei denen nicht nur alte Produkte zurückgeben werden können, sondern Fans darüber hinaus Profispieler treffen können (Manchester City, 2023). Somit hat PUMA durch das Circular Lab das Geschäftsmodell bereits nachhaltig angepasst und tauscht sich unter Berücksichtigung der jeweiligen Bedürfnisse eng mit Recycling- und Logistikpartnern, Beratungsfirmen, Materialforschungsunternehmen, Einzelhändlern, Sportklubs, Fans und Kunden aus.

Insbesondere ist bei PUMA ein klarer Fokus erkennbar, Kunden und weitere Akteure beim Aufbau einer Kreislaufwirtschaft aktiv zu involvieren. So nutzt PUMA im Rahmen des „Voices of a RE:GENERATION“ Projekts sowohl Social Media als auch ihre Forever Better Nachhaltigkeitswebseite, um Transparenz zu schaffen, Wissen zu vermitteln, Vordenkern der kommenden Generation eine Stimme zu geben und Kunden zum Umdenken zu bewegen. Beispielsweise postet PUMA auf Instagram, YouTube und der Firmenwebsite regelmäßig kurze Reels, in denen Influencer und Mitarbeiter Tipps geben, wie man die Lebensdauer von Kleidung und Schuhen verlängern kann (PUMA, 2024b). In Bezug auf das Schaffen von Transparenz und die Übermittlung von Wissen ermöglicht PUMA zudem Einblicke hinter die Fabriktore der Zulieferbetriebe in Bangladesch, Vietnam und der Türkei, und informiert Interessierte im Spotify Podcast „RE:GEN Reports by PUMA“ sowie auf der Webseite über Fortschritte zur Realisierung zirkulärer Mode, den Einsatz innovativer Materialien und Stoffe, oder neuartige Recyclingtechnologien.

Diese vielfältigen Interaktionen mit relevanten Akteuren haben dazu beigetragen, dass PUMA bereits eine Reduktion an Deponieabfällen um 64.7% pro Schuhpaar und 87.4% je Kleidungsstück erzielen konnte (PUMA, 2024d). PUMA wird als Marke sicherlich weiter

gemeinsam mit allen beteiligten Akteuren an dem Aufbau einer Kreislaufwirtschaft arbeiten. Allerdings muss hierbei im Sinne einer Markenstrategie insbesondere die Balance zwischen Wachstum und ökonomischen Ziele sowie der authentischen und glaubwürdigen Weiterverfolgung und Kommunikation der Nachhaltigkeitsbemühungen gefunden werden.

4.2.3.2 H&M

Mit mehr als 4,800 Läden verteilt über 77 Länder und Onlineshops in 54 Ländern ist die H&M Gruppe eine der weltweit größten Fashion-Marken (Ellen MacArthur Foundation, 2021). Aufgrund des praktizierten Fast Fashion Geschäftsmodells werden auf der einen Seite kontinuierlich neue Kleidungsstücke produziert, auf der anderen Seite aber auch immer mehr Altkleidung von Kunden entsorgt (Beyer & Arnold, 2021). Entsprechend hat sich H&M zum Ziel gesetzt, von einem linearen zu einem zirkulären Geschäftsmodell überzugehen und bis 2025 alle Produkte so zu designen, dass sie Teil einer Kreislaufwirtschaft werden (Jæger & Myrold, 2023).

Im Rahmen der Ellen MacArthur Foundation und deren Circular Design Framework experimentiert H&M daher mit neuen Ansätzen für kreislauffähiges Produktdesign und setzt zunehmend auf die Verwendung von Monomaterialien (z.B. nur Polyester oder Baumwolle), die einfacher in ihre Bestandteile zerlegt und wiederverwertet werden können (H&M, 2024a). Darüber hinaus hat H&M ein globales Recyclingprogramm in seinen Filialen etabliert, über das Kunden gebrauchte Kleidung und Textilien im Tausch gegen einen Gutschein als Anreiz zur Teilnahme zurückgeben können (Bocken, 2021). So wurden 2022 14,768 Tonnen an Altkleidung gesammelt, wovon 70% wiederverkauft, 22% recycelt und 8% entsorgt wurden (H&M, 2023). Zudem sollen bis 2030 50% aller eingesetzten Materialien recycelt und die restlichen 50% nachhaltig produziert werden (H&M, 2024a). Um dieses Ziel zu erreichen, hat H&M eine „Conscious Exclusive Kollektion“ herausgebracht, bei der organische Baumwolle, recyceltes Polyester und innovative Materialien wie Piñatex (eine vegane Alternative zu Leder

auf Basis von Ananasfasern) und Orange Fiber (eine Textilfaser aus Zitrusabfällen) verwendet werden (Utopia, 2019).

Um den Aufbau einer Kreislaufwirtschaft voranzutreiben, spielt auch bei H&M die Zusammenarbeit mit relevanten Akteuren eine große Rolle. 2023 gründete H&M bspw. zusammen mit Remondis ein Joint Venture namens Looper Textile, das lokalen Gemeinden und Einzelhändlern Lösungen bietet, um die Lebensdauer nicht mehr genutzter Kleidungsstücke durch Wiederverwendung und Recycling zu verlängern (Re-Textil, 2023). Des Weiteren unterstützt H&M durch die Kooperation mit Secondhand-Anbieter Sellpy den Wiederverkauf von Kleidung (Handelsblatt, 2024). Ebenso sind Innovationen zur Förderung einer Kreislaufwirtschaft von großer Relevanz. H&M unterstützt verschiedene Projekte und Start-Ups, die neue, umweltfreundliche Materialien und Recyclingmethoden entwickeln. Nennenswert ist hierbei die Kooperation mit dem Unternehmen Rubi, das Zellulosefasern aus industriellen CO2-Emissionen herstellt (H&M, 2024a). Ein weiteres Beispiel ist das „Green Machine“ Projekt mit dem Textilforschungsunternehmen HKRITA. Im Rahmen des Projekts sollen durch die Entwicklung einer Technologie zur Trennung von Baumwolle und Polyester in gemischten Textilien recycelte Fasern mit höherer Qualität entstehen (H&M Foundation, 2019). Abschließend ist die Gründung von Syre zusammen mit Vargas Holding erwähnenswert, durch die die Skalierung von „Textile to Textile“ Recycling von Polyester beschleunigt werden soll (Schramm, 2024).

In der Kommunikation setzt H&M auf Bewusstseinsbildung durch Kampagnen, die über die Umweltfolgen der Modeindustrie und die Relevanz nachhaltigen Konsums aufklären (Fashion Network, 2017; H&M, 2024b). Über die Webseite und Social Media teilt H&M regelmäßig Updates in Bezug auf den Aufbau einer Kreislaufwirtschaft, wie unter anderem Anleitungen zur Pflege und Reparatur von Kleidung (H&M, 2021, 2024a). Des Weiteren nutzt das Unternehmen Plattformen wie Instagram oder TikTok für interaktive Challenges, bei denen

Kunden ihre eigenen Outfits aus recycelten oder „alten“ Produkten zusammenstellen können. Hierbei spielen auch Partnerschaften mit Influencern und Nachhaltigkeitsbotschaftern, wie zum Beispiel Maisie Williams oder Olivia Palermo eine Rolle, da diese die Authentizität der Botschaft verstärken und sie auch jüngeren Zielgruppen näherbringen (Influence Insider, 2024; Simone Preuss, 2021). Um insbesondere diese jüngeren und tendenziell umweltbewussten Menschen zu erreichen, organisiert H&M auch regelmäßig virtuelle Events und Erlebnisse, um über Nachhaltigkeitsthemen und die Kreislaufwirtschaft zu sprechen (Jule Scott, 2023).

Auf diese Weise versucht H&M einen gesellschaftlichen Wandel hin zu bewussterem Konsum zu fördern und Transparenz zu schaffen bezüglich der Herausforderungen beim Aufbau einer Kreislaufwirtschaft. Trotz der vielversprechenden Kollaborationen mit Kunden, sowie weiteren Akteuren aus den Bereichen Forschung, Recycling, Einzelhandel und Social Media gilt es zukünftig noch einige Herausforderungen für die Marke zu lösen, wie bspw. die Integration der Prinzipien der Kreislaufwirtschaft in allen Märkten weltweit, weitere Anpassungen in der gesamten Lieferkette sowie die kontinuierliche Förderung des Umdenkens bei Kunden.

4.2.3.3 Patagonia

Neben kommerziellem Erfolg und Innovationskraft ist Patagonia insbesondere bekannt für ein starkes Engagement im Bereich Nachhaltigkeit und gilt als Vorreiter beim Thema Kreislaufwirtschaft (Rattalino, 2018). Mit seiner „Common Threads“ Initiative zielt Patagonia darauf ab, den Produktlebenszyklus durch Reparatur, Wiederverwendung und Recycling zu verlängern (Planet Aid, 2012). Über die Plattform „Worn Wear“ bietet Patagonie Kunden die Möglichkeit, gebrauchte Produkte einzutauschen, die dann repariert, aufgearbeitet und weiterverkauft werden (Bergfreunde, 2017). Wenn die Produkte nicht mehr reparierbar sind, arbeitet Patagonia und seine Händler mit Rücknahmesystemen, um die alten Materialien zu recyclen und wiederzuverwenden (Infinited Fiber, 2022). Des Weiteren legt Patagonia großen

Wert auf nachhaltige Produktionsstandards sowie die Verwendung nachhaltiger Materialien (Dezi et al., 2022). So wird seit 1994 nur noch Baumwolle in Bioqualität bei der Herstellung der Produkte verwendet. Außerdem führte Patagonia 1993 Fleece aus recycelten Plastikflaschen ein und war damit die erste Outdoor Bekleidungsmarke, die Abfall in Kleidung verwandelte (Rattalino, 2018). Inzwischen arbeitet Patagonia unter anderem mit Textile Exchange zusammen, einer globalen Non-Profit-Organisation, die nachhaltige Materialbeschaffung in der Textilindustrie fördert (Textile Exchange, 2024). Diese Zusammenarbeit ermöglicht es Patagonia, auf die Entwicklung und Förderung neuer, nachhaltiger Materialien zuzugreifen und gemeinsam mit anderen Akteuren der Branche Standards für umweltfreundliche Textilien zu schaffen. Erst kürzlich hat Patagonia zudem eine Zusammenarbeit mit dem Unternehmen Eastman verkündet, um 8000 Pfund an Bekleidungsabfällen zu recyclen. Mithilfe seiner molekularen Recyclingtechnologie kann Eastman Kleidung in molekulare Bausteine zerlegen, um daraus neue Fasern herzustellen (Eastman, 2024).

Weiterhin setzt Patagonia auf Kollaborationen mit gemeinnützigen Organisationen. So trat Patagonia 2024 der „Pack4Good“ Initiative von Canopy bei, um Produktverpackungen durch den Einsatz alternativer Fasern aus erneuerbaren Materialien oder Abfallprodukten nachhaltiger zu machen (Ecotextile, 2024). Durch die Gründung der Initiative „1% for the Planet“ spendet Patagonia außerdem 1% des Umsatzes oder 10% des Gewinns an Umweltorganisationen, wie Save the Blue Heart of Europe, Sunrise Movement oder Ocean Conservancy, um die Finanzierung von Naturschutzprojekten zu fördern (Patagonia, 2024). Gleichzeitig bemüht sich Patagonia um Transparenz in Bezug auf die eigenen Umweltauswirkungen und seine kreislaufwirtschaftlichen Maßnahmen entlang der gesamten Lieferkette. So setzt das Unternehmen beispielsweise auf die Verwendung des Higg Index, der von der Sustainable Apparel Koalition definiert wurde, um eine einheitliche Bewertung der

Nachhaltigkeitsleistungen zu schaffen (ISPO, 2020). In der Kommunikation mit Kunden setzt Patagonia vor allem auf die eigene Webseite, wo neue Partnerschaften, Aktivitäten und Innovationen zur Erreichung des Ziels einer Kreislaufwirtschaft verkündet werden. Die Kollaborationen mit gemeinnützigen Organisationen verstärken hierbei die Glaubwürdigkeit von Patagonia und erhöhen die Reichweite, da Letztere unter anderem auch via Social Media an ihre Follower kommunizieren. Patagonia selbst scheint hier sehr vorsichtig zu sein, um Vorwürfe von Greenwashing zu vermeiden, und kooperiert nur sehr limitiert mit Influencern, Sportklubs oder professionellen Athleten. Stattdessen fokussiert sich die Marke auf lokale Events, wie zum Beispiel die Nutzung von „Worn Wear“ Reparaturtrucks, mit denen sie verschiedene Städte anfahren und kostenlos Produkte reparieren (SGI Europe, 2023). Nichtsdestotrotz kam es in der Vergangenheit bereits zu Greenwashing Vorwürfen gegenüber der Marke, wie z. B. in Bezug auf Patagonia‘s Kampagne „Buy Less“. Trotz der Aufforderung weniger zu kaufen, führte die Markenkampagne zu Wachstum und zusätzlichem Konsum (Eric Lowitt, 2011).

Die oben beschriebenen Bemühungen zeigen jedoch, dass nachhaltigeres Wirtschaften durch den Aufbau einer Kreislaufwirtschaft durchaus möglich sein kann. Das Handeln von Patagonia führt zur Verlängerung des Produktlebenszyklus, schafft Aufmerksamkeit für das Thema und bewegt dadurch vermehrt Kunden zum Umdenken.

4.2.4 Implikationen aus den Fallstudien

Basierend auf den drei Fallstudien der Marken PUMA, Patagonia und H&M lassen sich Handlungsempfehlungen für Theorie und Praxis ableiten. Hierbei stehen bei allen drei Marken insbesondere die Möglichkeiten zur Wert-Kokreation und die Interaktionen mit interessierten und relevanten Akteuren im Vordergrund (siehe Abb. 1).

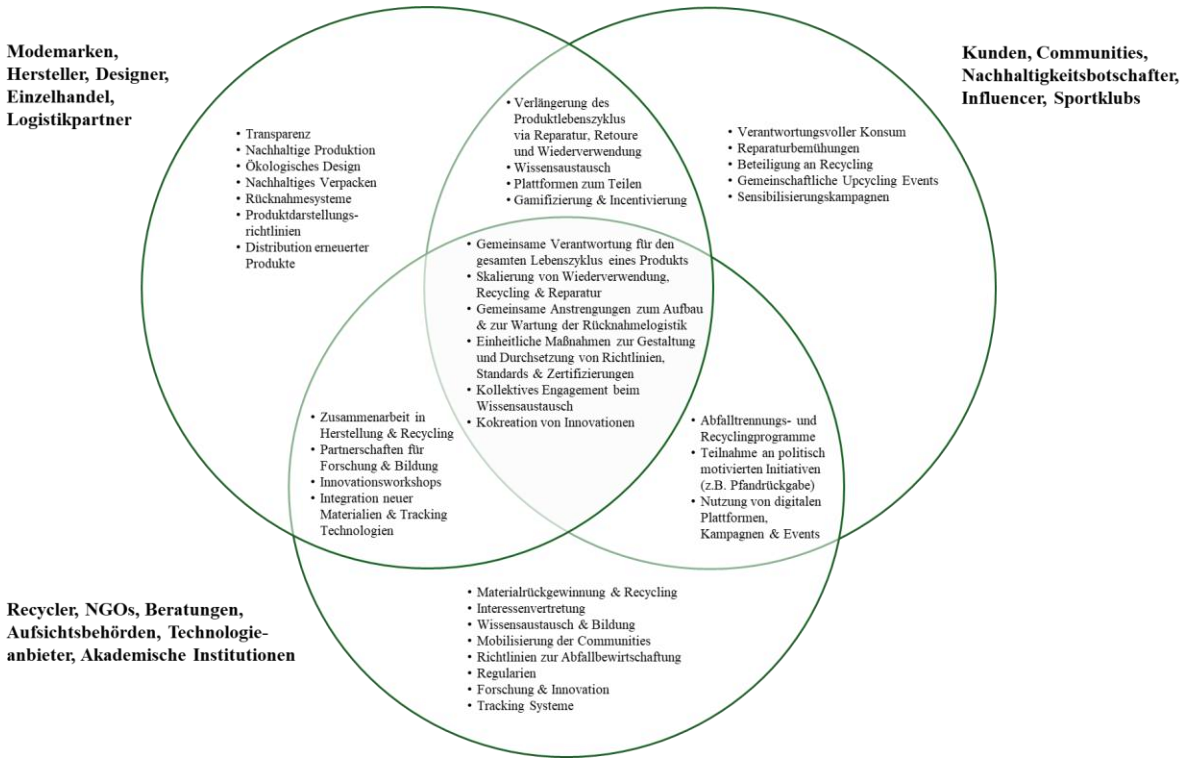


Figure 4.2-1: Interaktionen relevanter Akteure in einer Kreislaufwirtschaft

Zunächst ist erwähnenswert, dass alle drei Marken darum bemüht sind, die Reparierbarkeit von Produkten zu fördern. In diesem Beitrag wurden verschiedene Möglichkeiten vorgestellt, wie Kunden animiert werden können, die Lebensdauer ihrer Produkte zu verlängern. Insbesondere können interaktive Upcycling Challenges, kurze Reels in Social Media oder physische Community Events als Motivation fungieren. Marken sollten daher stärker auf langlebige Designs und Reparierbarkeit setzen, so wie beispielsweise Patagonia mit seiner „Worn Wear“ Initiative. In diesem Zusammenhang sind Partnerschaften mit Reparaturdiensten und die Einbindung der Kunden in den Erhalt und die Pflege von Produkten von zentraler Bedeutung. Außerdem sollten Marken wiederverkaufs- oder mietbasierte Geschäftsmodelle testen. H&M hat unter anderem durch die Kollaboration mit Sellpy aufgezeigt, wie dies funktionieren kann. Die Forschung sollte sich entsprechend mit Wert-Kokreationsansätzen zwischen Marken, Drittanbietern (z. B. Reparaturdienste) und weiterer relevanter Akteure beschäftigen.

Weiterhin zeigen die Fallstudien, wie wichtig der Ausbau von Recycling- und Rücknahmeprogrammen ist. Kollaborationen mit Recyclingunternehmen und Einzelhändlern können diesen Prozess unterstützen. Dies zeigen Beispiele wie die Zusammenarbeit von PUMA mit 11Teamsports zum Ausbau des Rücknahmesystems und mit Ortessa im Rahmen des RE:SUEDE Projekts, sowie von H&M mit Looper Textile zur Förderung der Rücknahme und Wiederverwendung. In diesem Zusammenhang wird deutlich, dass die Schaffung von Anreizen für Kunden zur Rückgabe alter Produkte bspw. durch gemeinschaftliche Events unerlässlich ist. Zukünftige Forschung sollte daher neue Erkenntnisse hinsichtlich der Anreizsysteme für eine Produktrückgabe liefern. Darüber hinaus sollte erforscht werden, wie Unternehmen und Recyclingdienstleister in einheitlichen, unternehmensübergreifenden Rücknahmesystemen zusammenarbeiten können.

Ein weiterer wichtiger Aspekt ist die Innovation im Kontext nachhaltiger Materialien. Patagonia und H&M zeigen, dass durch Partnerschaften, wie mit Eastman oder HKRITA, neue Materialien entwickelt und bestehende Technologien verbessert werden können. Netzwerke wie die Ellen MacArthur Foundation, mit teilnehmenden Unternehmen wie H&M, Gucci oder Nestle, können diesbezügliche Fortschritte durch gemeinsamen Wissensaufbau und die Erarbeitung von Best Practices fördern. Diese Kollaborationen könnten durch staatliche Förderprogramme für nachhaltige Materialien oder durch Kooperationen mit Universitäten, NGOs und spezialisierten Forschungsunternehmen weiter verstärkt werden. Entsprechend könnte zukünftige Forschung die Rolle öffentlicher und privater Partnerschaften untersuchen, um nachhaltige Innovationen in die Breite zu tragen und so die Basis für zukünftige ökologische Standards zu schaffen.

Des Weiteren zeigen die Fallstudien, dass Transparenz und Wissensvermittlung insbesondere gegenüber Kunden und potenziell Interessierten weitere wichtige Faktoren sind, um Anschuldigungen von Greenwashing zu vermeiden. Marken sollten diesen Akteuren daher

sachliche Informationen zur Materialherkunft und Produktfertigung bereitstellen und unabhängige, von Drittparteien validierte Nachhaltigkeitsberichte in ihre Kommunikationsstrategie integrieren. Ein Beispiel hierfür ist das Circular Lab von PUMA, das Kunden Einblicke hinter die Kulissen der Lieferkette gewährt und so Transparenz schafft. Beispielsweise setzt PUMA hierbei auf eine balancierte Mischung aus sachlicher Informationsbereitstellung durch Nachhaltigkeitsberichte und abwechslungsreicher Wissensvermittlung durch den Spotify Podcast oder Offline Events im Rahmen des „Voices of a RE:GENERATION“ Projekts. Aufbauend auf diesen Erkenntnissen sollte erforscht werden, wie Transparenz in Lieferketten durch die Koordination und Zusammenarbeit verschiedener Akteure verbessert werden kann. Insbesondere Modelle zu Governance und Anreizsystemen könnten den Austausch von Daten entlang der Lieferkette fördern.

Abschließend ist hervorzuheben, wie wichtig es ist, Kunden zum Mitwirken am Aufbau einer Kreislaufwirtschaft zu motivieren und ihnen Angebote und Möglichkeiten zur Wert-Kokreation zu bieten. Marken sollten verstärkt auf Bildungs- und Aufklärungskampagnen sowie interaktive Events und Workshops setzen, die Kunden dazu veranlassen, umweltbewusste Entscheidungen zu treffen. Beispielsweise hat Patagonia es durch Kampagnen, wie „Buy Less“, geschafft, dass Kunden ihr Konsumverhalten kritisch reflektieren und bereit sind, für umweltfreundliche Produkte einen höheren Preis zu bezahlen und die nachhaltige Herstellung von Produkten stärker zu schätzen. So nutzt auch PUMA seine „Forever Better“ Kommunikationsstrategie, um den Gedanken der Kreislaufwirtschaft in das tägliche Leben der Kunden zu integrieren und langfristige Verhaltensänderungen zu fördern. Hierbei setzt PUMA unter anderem auf Events in Kooperation mit Fußballklubs, bei denen Fans nicht nur alte Produkte zurückgeben, sondern auch ihre Idole treffen können. Diese Verbindung zwischen persönlicher Leidenschaft und Nachhaltigkeit schafft eine tiefere Bindung an die Marke und motiviert zur Teilnahme an zirkulären Programmen.

Mit Formaten wie H&Ms Upcycling Challenges auf Social Media oder PUMAs Zusammenarbeit mit Influencern im Rahmen von „Voices of a Regeneration“ können Marken zudem jüngere Zielgruppen zur aktiven Teilnahme und Unterstützung einer nachhaltigen Zukunft inspirieren. H&M setzt in diesem Zusammenhang auch auf prominente Nachhaltigkeitsbotschafter, die als glaubwürdige Vorbilder jüngere Kunden ansprechen, und auf virtuelle Events, um über nachhaltige Praktiken aufzuklären. Folglich lässt sich festhalten, dass die Förderung von Kundenengagement und die Veränderung des Konsumverhaltens entscheidende Faktoren für den Erfolg einer Kreislaufwirtschaft sind. Die Fallstudien bieten wertvolle Einblicke, wie Marken in Zusammenarbeit mit weiteren relevanten Akteuren Kunden durch gezielte Maßnahmen zum Umdenken bewegen und aktiv in den Aufbau einer Kreislaufwirtschaft einbinden können.

4.2.5 Fazit

Die oben ausgeführten Fallstudien zeigen, dass die Zusammenarbeit zwischen Marken, Lieferanten, Forschungsunternehmen, Kunden und weiteren Akteuren zentral für die erfolgreiche Umsetzung einer Kreislaufwirtschaft ist. Durch Transparenz, eine Verlängerung der Produktlebensdauer, gut organisierte Rücknahmesysteme, die Entwicklung neuer Materialien sowie Angebote und Möglichkeiten zur Wert-Kokreation lässt sich der Aufbau eines zirkulären Systems realisieren.

Für Unternehmen ist besonders empfehlenswert, kollaborative Innovationsansätze wie Workshops mit Kunden und Partnern frühzeitig in Produktentwicklungs- und Recyclingprozesse zu integrieren, um durch direkte Einbindung wertvolles Feedback und praxisnahe Lösungen zu gewinnen. Die gezielte Aktivierung und Einbindung von Communities über digitale Engagement-Plattformen oder lokale Events erhöht nicht nur die Akzeptanz zirkulärer Angebote, sondern führt auch zu höheren Rücklaufquoten bei

Rücknahme- und Reparaturprogrammen, was die Kreislauffähigkeit von Produkten deutlich verbessert.

Kunden erhalten durch solche Initiativen neue Rollen jenseits der klassischen Käuferfunktion, indem sie aktiv an Feedbackprozessen, Reparaturaktionen oder Upcycling-Initiativen teilnehmen und damit selbst Teil der Wertschöpfung werden; hierfür sind niedrigschwellige Bildungsangebote und leicht zugängliche Informationsformate essenziell, um das Engagement nachhaltig zu fördern.

Politische Entscheidungsträger und Förderinstitutionen sollten regulatorische Anreize schaffen, die unternehmensübergreifende Rücknahmesysteme fördern, etwa durch verpflichtende Rücknahmequoten oder finanzielle Förderungen für nachhaltige Materialinnovationen, um Unternehmen bei den oft hohen Transformationskosten zu entlasten und Kooperationen zu erleichtern. In diesem Kontext spielen Lieferanten und Materialproduzenten eine zentrale Rolle, da sie durch die Entwicklung innovativer, nachhaltiger Materialien und die zunehmende Zirkularität ihrer Lieferketten die Grundlage für langlebige und recyclingfähige Produkte schaffen. Förderprogramme können gezielt darauf ausgerichtet sein, diese Akteure bei der Erforschung und Implementierung zirkulärer Materiallösungen zu unterstützen, wodurch der gesamte Kreislauf gestärkt wird.

Abschließend eröffnet sich für Forschung und Wissenschaft die Möglichkeit, die Wirkung von Wert-Kokreation in zirkulären Kontexten systematisch zu analysieren, indem beispielsweise verschiedene Formen von Engagement wie Challenges, Gamifizierung oder Workshops hinsichtlich ihrer Effekte auf Akzeptanz und Nutzungsverhalten empirisch evaluiert werden.

Trotz der in diesem Beitrag herausgearbeiteten Handlungsempfehlungen bleiben bei der Etablierung erfolgreicher Markenstrategien zum Aufbau einer Kreislaufwirtschaft einige Herausforderungen bestehen. Regulierungsanforderungen, die Balance zwischen

Wachstumszielen und Nachhaltigkeit sowie die Notwendigkeit, Lieferketten effizienter zu gestalten, erfordern klare Strategien und Kooperationen mit vielfältigen Akteuren. Insbesondere das Umdenken der Kunden benötigt Zeit und kontinuierliche Anreize, um gewohnte Konsummuster aufzubrechen und die Akzeptanz für nachhaltige Alternativen zu erhöhen. Ein entscheidender Erfolgsfaktor liegt hierbei in der Einbindung der Kunden und deren Möglichkeiten zur Interaktion mit der Marke und mit anderen Kunden.

4.2.6 Referenzen

11Teamsports. (2024). *PUMA RE:FIBRE*. https://www.11teamsports.com/de-de/l/puma-re-fibre

Bakker, C., Wang, F., Huisman, J., & Hollander, M. den (2014). Products that go round: Exploring product life extension through design. *Journal of Cleaner Production*, *69*, 10–16. https://doi.org/10.1016/j.jclepro.2014.01.028

Bansal, P., & Roth, K. (2000). Why Companies Go Green: A Model of Ecological Responsiveness. *Academy of Management Journal*, *43*(4), 717–736. https://doi.org/10.5465/1556363

Bergfreunde. (2017). *Reparieren statt wegschmeissen - Das Patagonia Worn Wear Programm*. https://www.bergfreunde.de/blog/patagonia-nachhaltigkeit/

Beyer, K., & Arnold, M. G. (2021). Circular Approaches and Business Model Innovations for Social Sustainability in the Textile Industry. In A. Matthes, K. Beyer, H. Cebulla, M. G. Arnold, & A. E. Schumann (Eds.), *Sustainable Textile and Fashion Value Chains: Drivers, Concepts, Theories and Solutions* (pp. 341–373). Springer Nature. https://doi.org/10.1007/978-3-030-22018-1_19

Bick, R., Halsey, E., & Ekenga, C. C. (2018). The global environmental injustice of fast fashion. *Environmental Health : A Global Access Science Source*, *17*(1), 92. https://doi.org/10.1186/s12940-018-0433-7

Bocken, N. (2021). Circular business models : Mapping experimentation in multinational firms. In *Circular Economy* (pp. 63–84). Routledge. https://doi.org/10.4324/9780367816650-5

Bocken, N., & Ritala, P. (2022). Six ways to build circular business models. *Journal of Business Strategy*, *43*(3), 184–192. https://doi.org/10.1108/JBS-11-2020-0258

Boukhatmi, Ä., Nyffenegger, R., & Grösser, S. N. (2023). Designing a digital platform to foster data-enhanced circular practices in the European solar industry. *Journal of Cleaner Production*, *418*, 137992. https://doi.org/10.1016/j.jclepro.2023.137992

Cheung, W. M., Marsh, R., Griffin, P. W., Newnes, L. B., Mileham, A. R., & Lanham, J. D. (2015). Towards cleaner production: a roadmap for predicting product end-of-life costs at early design concept. *Journal of Cleaner Production*, *87*, 431–441. https://doi.org/10.1016/j.jclepro.2014.10.033

Chuah, S. H.-W., El-Manstrly, D., Tseng, M.-L., & Ramayah, T. (2020). Sustaining customer engagement behavior through corporate social responsibility: The roles of environmental concern and green trust. *Journal of Cleaner Production*, *262*, 121348. https://doi.org/10.1016/j.jclepro.2020.121348

Dezi, L., Hysa, X., Calabrese, M., & Mercuri, F. (2022). Open Total Quality Management in the Circular Economy age: a social enterprise perspective through the case of Patagonia. *Total Quality Management & Business Excellence*, 1–15. https://doi.org/10.1080/14783363.2022.2051698

Dissanayake, D., & Weerasinghe, D. (2022). Towards Circular Economy in Fashion: Review of Strategies, Barriers and Enablers. *Circular Economy and Sustainability*, *2*(1), 25–45. https://doi.org/10.1007/s43615-021-00090-5

Eastman. (2024). *Eastman and Patagonia join forces to tackle global textile waste crisis*. https://www.eastman.com/en/media-center/news-stories/2024/eastman-patagonia-join-forces-to-tackle-global-textile-waste-crisis

Ecotextile. (2024). *Patagonia joins sustainable packaging programme*. https://www.ecotextile.com/2024090932456/fashion-retail-news/patagonia-joins-sustainable-packaging-programme.html

Ellen MacArthur Foundation. (2021). *A journey to becoming 100% circular and climate positive: H&M Group*. https://www.ellenmacarthurfoundation.org/circular-examples/hm-group

Eric Lowitt. (2011). *Patagonia's "Buy Less" Campaign May Lead to More Revenue*. https://hbr.org/2011/10/patagonias-buy-less-campai

Fashion Network. (2017). *H&M launches new Garment Collecting campaign, 'Bring It'*. https://au.fashionnetwork.com/news/H-m-launches-new-garment-collecting-campaign-bring-it-,785099.html

Frishammar, J., & Parida, V. (2019). Circular Business Model Transformation: A Roadmap for Incumbent Firms. *California Management Review*, *61*(2), 5–29. https://doi.org/10.1177/0008125618811926

Geissdoerfer, M., Morioka, S. N., Carvalho, M. M. de, & Evans, S. (2018). Business models and supply chains for the circular economy. *Journal of Cleaner Production*, *190*, 712–721. https://doi.org/10.1016/j.jclepro.2018.04.159

Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production*, *143*, 757–768. https://doi.org/10.1016/j.jclepro.2016.12.048

Giannetti, B. F., Diaz Lopez, F. J., Liu, G., Agostinho, F., Sevegnani, F., & Almeida, C. M. (2023). A resilient and sustainable world: Contributions from cleaner production, circular economy, eco-innovation, responsible consumption, and cleaner waste systems. *Journal of Cleaner Production*, *384*, 135465. https://doi.org/10.1016/j.jclepro.2022.135465

H&M. (2021). *How to upcycle with Joe Black*. https://www.youtube.com/watch?v=o99WCGuLK64

H&M. (2023). *H&M Group Annual and Sustainability Report 2022*. https://hmgroup.com/about-us/corporate-governance/annual-report/

H&M. (2024a). *Ausbessern & Umändern*. https://www2.hm.com/de_de/nachhaltigkeit-bei-hm/take-care/repair-remake.html?srsltid=AfmBOooIyZ4H7kwPn0zNBxDAn0SKHSjUDDJ928329MxIr7VmUerX9aR5

H&M. (2024b). *H&M Group Annual and Sustainability Report 2023*. https://hmgroup.com/about-us/corporate-governance/annual-report/

H&M. (2024c). *Let's close the loop*. https://www2.hm.com/en_gb/sustainability-at-hm/our-work/close-the-loop.html?srsltid=AfmBOoqpxDDqv9XxQ7HnSOu-N29H24gjICf9PRJdW1k32WWrTPChP3yZ

H&M Foundation. (2019). *Green Machine – separating blend textiles at scale*. https://hmfoundation.com/project/recycling-the-green-machine/

Hahn, R., Reimsbach, D., & Schiemann, F. (2015). Organizations, Climate Change, and Transparency. *Organization & Environment*, *28*(1), 80–102. https://doi.org/10.1177/1086026615575542

Haines-Gadd, M., Charnley, F., & Encinas-Oropesa, A. (2021). Self-healing materials: A pathway to immortal products or a risk to circular economy systems? *Journal of Cleaner Production*, *315*, 128193. https://doi.org/10.1016/j.jclepro.2021.128193

Handelsblatt. (2024). *Eine Branche im Umbruch: Der Wandel hin zu einer nachhaltigeren Modebranche.* https://www.handelsblatt.com/adv/presseportal/hundm-hennes-und-mauritz-b-v-und-cokg-die-modeindustrie-nachhaltig-veraendern-video/29869958.html

Hansen, H., Jensen, A., & Maagaard, C. (2022). The brand manager as practical author. An empirical study of the co-creation of a CSR-based brand. *Journal of Brand Management*, *29*(6), 584–597. https://doi.org/10.1057/s41262-022-00284-8

Infinited Fiber. (2022). *How we're stopping waste from being wasted with Patagonia's 'Take-Back' Program*. https://infinitedfiber.com/blog/2022/07/19/how-were-stopping-waste-from-being-wasted-with-patagonias-take-back-program/

Influence Insider. (2024). *Top H&M Influencers: Who's Shaping Fashion Trends?* https://influence-insider.com/top-hm-influencers-whos-shaping-fashion-trends/

ISPO. (2020). *Der Higg Index der SAC: Gemeinsam für mehr Nachhaltigkeit*. https://www.ispo.com/maerkte/der-higg-index-fuer-mehr-nachhaltigkeit

Jæger, B., & Myrold, S. (2023). Textile Industry Circular Supply Chains and Digital Product Passports. Two Case Studies. In *IFIP Advances in Information and Communication Technology, Advances in Production Management Systems. Production Management Systems for Responsible Manufacturing, Service, and Logistics Futures: IFIP WG 5.7 International Conference, APMS 2023, Trondheim, Norway, September 17-21, 2023, Proceedings, Part IV* (1st edition 2023, pp. 350–363). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-43688-8_25

Johansson, N., & Henriksson, M. (2020). Circular economy running in circles? A discourse analysis of shifts in ideas of circularity in Swedish environmental policy. *Sustainable Production and Consumption*, *23*, 148–156. https://doi.org/10.1016/j.spc.2020.05.005

Jule Scott. (2023). *Virtuelle Kleidung, digitale Welten und Nachhaltigkeit: H&M lanciert Erlebnisuniversum auf Roblox*. https://fashionunited.de/nachrichten/mode/virtuelle-kleidung-digitale-welten-und-nachhaltigkeit-h-m-lanciert-erlebnisuniversum-auf-roblox/2023010649762

Kirchherr, J., Piscicelli, L., Bour, R., Kostense-Smit, E., Muller, J., Huibrechtse-Truijens, A., & Hekkert, M. (2018). Barriers to the Circular Economy: Evidence From the European

Union (EU). *Ecological Economics*, *150*, 264–272. https://doi.org/10.1016/j.ecolecon.2018.04.028

Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation and Recycling*, *127*, 221–232. https://doi.org/10.1016/j.resconrec.2017.09.005

Korhonen, J., Honkasalo, A., & Seppälä, J. (2018). Circular Economy: The Concept and its Limitations. *Ecological Economics*, *143*, 37–46. https://doi.org/10.1016/j.ecolecon.2017.06.041

Kunststoffe. (2023). *Puma weitet Re:Fibre-Projekt aus*. https://www.kunststoffe.de/a/news/puma-weitet-refibre-projekt-aus-5325898

Lewandowska, A., Witczak, J., & Kurczewski, P. (2017). Green marketing today – a mix of trust, consumer participation and life cycle thinking. *Management*, *21*(2), 28–48. https://doi.org/10.1515/manment-2017-0003

Lewandowski, M. (2016). Designing the Business Models for Circular Economy—Towards the Conceptual Framework. *Sustainability*, *8*(1), 43. https://doi.org/10.3390/su8010043

Manchester City. (2023). *Over 470 items of clothes donated by fans at PUMA's RE:FIBRE matchday takeover*. https://www.mancity.com/news/club/puma-refibre-470-items-donated-matchday-takeover-63819926

Mostaghel, R., & Chirumalla, K. (2021). Role of customers in circular business models. *Journal of Business Research*, *127*, 35–44. https://doi.org/10.1016/j.jbusres.2020.12.053

Mou, Y., Luo, Y., Su, Z., Wang, J., & Liu, T. (2021). Evaluating the dynamic sustainability and resilience of a hybrid urban system: case of Chengdu, China. *Journal of Cleaner Production*, *291*, 125719. https://doi.org/10.1016/j.jclepro.2020.125719

Murray, A., Skene, K., & Haynes, K. (2017). The Circular Economy: An Interdisciplinary Exploration of the Concept and Application in a Global Context. *Journal of Business Ethics*, *140*(3), 369–380. https://doi.org/10.1007/s10551-015-2693-2

Pal, R., & Gander, J. (2018). Modelling environmental value: An examination of sustainable business models within the fashion industry. *Journal of Cleaner Production*, *184*, 251–263. https://doi.org/10.1016/j.jclepro.2018.02.001

Patagonia. (2024). *1% for the Planet*. https://www.onepercentfortheplanet.org/about/story

Planet Aid. (2012). *Patagonia's Common Threads Initiative*. https://www.planetaid.org/blog/patagonias-common-threads-initiative

Pucci, T., Casprini, E., Galati, A., & Zanni, L. (2020). The virtuous cycle of stakeholder engagement in developing a sustainability culture: Salcheto winery. *Journal of Business Research*, *119*, 364–376. https://doi.org/10.1016/j.jbusres.2018.11.009

PUMA. (2024a). *RE:FIBRE*. https://about.puma.com/de/node/3868

PUMA. (2024b). *RE:HACKS*. https://foreverbetter.com/de/voices-regeneration/rehacks

PUMA. (2024c). *RE:SUEDE*. https://about.puma.com/de/circularity/resuede

PUMA. (2024d). *Unsere 10FOR25 Ziele*. https://foreverbetter.com/de/our-targets

Rajput, S., & Singh, S. P. (2020). Industry 4.0 Model for circular economy and cleaner production. *Journal of Cleaner Production*, *277*, 123853. https://doi.org/10.1016/j.jclepro.2020.123853

Ramaswamy, V. (2009). Leading the transformation to co-creation of value. *Strategy & Leadership*, *37*(2), 32–37. https://doi.org/10.1108/10878570910941208

Rattalino, F. (2018). Circular advantage anyone? Sustainability-driven innovation and circularity at Patagonia, Inc. *Thunderbird International Business Review*, *60*(5), 747–755. https://doi.org/10.1002/tie.21917

Re, B., & Magnani, G. (2023). Value co-creation processes in the context of circular entrepreneurship: A quantitative study on born circular firms. *Journal of Cleaner Production*, *392*, 135883. https://doi.org/10.1016/j.jclepro.2023.135883

Re, B., Magnani, G., & Zucchella, A. (2021). The Future of Sustainability: Value Co-creation Processes in the Circular Economy. In *The Palgrave Handbook of Corporate Sustainability in the Digital Era* (pp. 503–527). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-42412-1_25

Re-Textil. (2023). *H&M Group und REMONDIS gründen Joint Venture*. https://www.re-textil.de/aktuelles/detail/hm-group-und-remondis-gruenden-joint-venture/

Schramm, T. (2024). *Recycling-Start-up Syre erhält 100 Mio Dollar von Investoren: H&M und Ikea sind beteiligt*. https://www.euwid-recycling.de/news/international/recycling-start-up-syre-erhaelt-100-mio-dollar-von-investoren-hm-und-ikea-sind-beteiligt-280524/

SGI Europe. (2023). *Patagonia's Re:Thinking: How circular is one of the most ambitious outdoor brands?* https://www.sgieurope.com/patagonias-rethinking-how-circular-is-one-of-the-most-ambitious-outdoor-brands/105191.article

Simone Preuss. (2021). *Maisie Williams und H&M fördern Nachhaltigkeit jetzt auch virtuell*. https://fashionunited.de/nachrichten/business/maisie-williams-und-h-m-foerdern-nachhaltigkeit-jetzt-auch-virtuell/2021041440466

sneaker.de. (2024). *PUMA Circular Lab: RE:SUEDE Project*. https://sneaker.de/news/puma-circular-lab-re-suede-project

Textile Exchange. (2024). *We're guiding a global community towards more purposeful materials production*. https://textileexchange.org/members/

TextilWirtschaft. (2024). *Puma bringt Re:Suede 2.0 auf den Markt*. https://www.textilwirtschaft.de/business/news/zwei-jahre-experiment-mit-kompostierbaren-schuhen-puma-bringt-resuede-2.0-auf-den-markt-244744

Tukker, A. (2015). Product services for a resource-efficient and circular economy – a review. *Journal of Cleaner Production*, *97*, 76–91. https://doi.org/10.1016/j.jclepro.2013.11.049

Urbinati, A., Chiaroni, D., & Chiesa, V. (2017). Towards a new taxonomy of circular economy business models. *Journal of Cleaner Production*, *168*, 487–498. https://doi.org/10.1016/j.jclepro.2017.09.047

Utopia. (2019). *H&M: Wie nachhaltig ist die Conscious Exclusive Kollektion wirklich?* https://utopia.de/hm-nachhaltig-conscious-exclusive-collection_79729/

Zucchella, A., & Previtali, P. (2019). Circular business models for sustainable development: A "waste is food" restorative ecosystem. *Business Strategy and the Environment*, *28*(2), 274–285. https://doi.org/10.1002/bse.2216

Chapter 5: Conclusion

5.1 Summary

The overarching aim of this thesis was to advance the understanding of how sportswear brands can promote sustainability through customer engagement in the context of CSR and circularity. Therefore, this thesis addressed a relevant research gap at the intersection of customer engagement and sustainability. While existing literature has extensively examined sustainability strategies of firms and customer behavior in isolated contexts, there was a lack of integrated insights into the specific mechanisms through which engagement for sustainability can be facilitated in both digital and hybrid environments. In particular, little was known about how engagement unfolds across different sustainability contexts and levels of analysis.

To fill this gap, a research framework was developed that distinguishes between these two dimensions: the level of analysis (micro versus meso) and the sustainability context (CSR versus circularity). The four papers that form the core of this cumulative thesis were positioned along these dimensions to collectively build a comprehensive understanding of customer engagement for sustainability in the sportswear industry.

In papers 1 and 2, customer engagement in the context of CSR was examined at the micro level. These studies focused on dyadic relationships between brands and customers on DEPs. In Paper 1, the adiClub was conceptualized as a gamified LP, and qualitative research was conducted to identify distinct engagement practices. These were analyzed based on how brands can apply them strategically across the economic, social, and ecological dimensions of CSR. Building on this foundation, Paper 2 viewed the adiClub as an OBC, and a quantitative analysis was conducted to examine how the previously identified engagement forms influence customers' sustainable brand perception along the three aforementioned dimensions.

The meso-level perspective was addressed in Papers 3 and 4, which focused on circularity within broader multi-stakeholder networks. These studies examined how sportswear brands engage with customers and external partners, such as service providers and research institutions, to co-create circular solutions. Hence, the studies highlight that customer engagement for circularity does not occur in isolation but is embedded in constellations of various stakeholders with shared or complementary goals.

5.2 Theoretical implications

This thesis yields several important theoretical implications. First, the thesis advances our understanding of how brands interact with customers in gamified LPs. By examining the specific mechanisms through which gamification fosters engagement, it provides nuanced insights into how interactive and playful elements motivate sustained customer participation in sustainability-oriented engagement, an area that has been underexplored.

Second, it identifies new customer engagement practices in the context of CSR and circularity. Moving beyond traditional commercial objectives, it encompasses practices that promote sustainable customer behaviors to drive meaningful societal and environmental impact.

Third, it offers quantitative insights into the extent to which customer engagement on DEPs influences sustainable brand perception along the social, ecological, and economic dimensions of TBL. Treating each dimension as a separate construct is important because it recognizes that customer engagement may affect social responsibility, environmental stewardship, and economic responsibility in distinct ways. By differentiating these dimensions, the research captures nuanced effects that would be obscured if sustainable brand perception was treated as a single, aggregated construct.

Fourth, it develops a refined customer engagement framework for circularity by integrating well-established engagement dimensions with circular practices. This framework

offers scholars a structured lens to conceptualize participation in circular business models, bridging gaps between existing customer engagement theory and sustainability research and providing a foundation for investigating how such practices can advance sustainability objectives.

Fifth, it deepens our understanding of how brands can effectively promote circularity through customer engagement and how such efforts materialize in practice through coordinated, shared activities across stakeholders. By highlighting the interplay between brand strategies, customer behaviors, and collaborative stakeholder networks, it extends existing engagement research to account for the practical realities of implementing circular initiatives. Hence, this contribution highlights how multi-stakeholder engagement drives progress in circularity in real-world brand contexts, showing how collaborative efforts translate into tangible sustainability outcomes.

Collectively, these contributions offer a theoretically grounded understanding of how brands can promote CSR and circularity through customer engagement.

5.3 Managerial implications

From a managerial perspective, the findings offer valuable insights for sportswear brands and related industries seeking to operationalize sustainability through customer engagement. As sustainability becomes a key competitive driver, managers need to recognize that advancing CSR and circularity calls for tailored engagement strategies. The findings of this thesis provide practical guidance for leveraging DEPs and hybrid environments to foster meaningful participation in sustainability initiatives.

First, this thesis underscores the importance of designing EPs that go beyond purely transactional incentives and enable co-creative, meaningful interactions between brands and customers. Brands can strategically facilitate customer engagement for CSR through gamification, which emerged as a particularly powerful tool by making sustainability engaging

and rewarding. Managers should therefore view DEPs not simply as loyalty tools, but as orchestrators of sustainability experiences. This requires strategically aligning DEP touchpoints with CSR objectives. Examples include educational modules that support ecological goals, exclusive rewards that address economic goals, and challenges and feedback mechanisms that advance social goals, all integrated through participatory and collaborative formats.

Second, community interaction plays a central role in shaping sustainable brand perception. Engagement within OBCs can significantly enhance customers' perception of a brand's social, economic and ecological efforts. Workshops are effective customer touchpoints for strengthening social and ecological brand perception, as they provide opportunities for customers to share experiences, acquire knowledge, and contribute ideas. Challenges and feedback mechanisms further reinforce social brand perception, while exclusive content or rewards strengthen economic brand perception. Notably, enhancing ecological brand perception also positively influences economic perception, underscoring the interconnected value of sustainability efforts. Therefore, brands must seek to foster customer engagement in OBCs across various touchpoints.

Third, circularity-focused engagement requires customers to perform tasks such as returning products, repairing items, or participating in recycling programs, which can involve effort, complexity, and inconvenience. The findings highlight the importance of reducing participation barriers to make circular behavior normative. Managers should provide clear instructions, convenient drop-off points, mobile repair services, and seamless digital coordination tools. Additionally, involving customers early in the co-design of circular services ensures offerings align with expectations, routines, and perceived value, enhancing both engagement and adoption.

Fourth, successful circular engagement relies on integrating hybrid environments. Digital platforms can coordinate, communicate, and track circular behaviors, while physical environments such as repair workshops, return stations, and material processing hubs remain essential. Managers should design engagement strategies that seamlessly connect online and offline interactions, for example by enabling repair diagnostics, appointment bookings, and progress tracking through digital interfaces. This integration reduces friction, increases transparency, and fosters trust in circular practices.

Fifth, promoting circularity requires ecosystem-oriented thinking. Circular initiatives involve multiple actors, including recyclers, service providers, logistics partners, and research institutions. Managers should focus on coordinating across partners, aligning incentives, sharing data, and creating mutual value propositions. Digital platforms can facilitate collaboration and information flow, supporting coordinated actions that amplify the effectiveness of circular initiatives. Together, these insights provide an actionable roadmap for managers seeking to systematically embed customer engagement into sustainable brand management.

In summary, this thesis contributes to contemporary research by investigating how CSR and circularity can be promoted through customer engagement in the sportswear industry. Through a nuanced analysis across micro and meso levels and a focus on both CSR and circularity, it lays the foundation for future research and practice aimed at advancing customer engagement for a more sustainable future.

5.4 Future research

While this thesis offers important insights, several areas remain to be explored. This thesis primarily focuses on customer engagement initiated by brands or co-designed with partners. Future research could explore bottom-up engagement practices initiated by customers or

grassroots communities. Understanding how organic, customer-led engagement for sustainability emerges could reveal new levers for a brand's strategy.

The hybrid nature of customer engagement in sustainability initiatives also warrants further exploration. Future research should investigate how digital and physical touchpoints interact over time and how this interplay affects the customer journey. Examining these interactions is critical for understanding how engagement translates into meaningful sustainability outcomes, as the combination of online platforms and real-world activities may amplify commitment, foster collective identity, and strengthen perceived authenticity of sustainability efforts.

Additionally, more research is needed across industries and cultural contexts to understand how generalizable the findings are beyond the sportswear sector. Comparative studies across sectors and cultural settings are important for identifying how contextual factors, such as consumption norms, regulatory frameworks, and cultural values, influence customer engagement, as well as how transferable engagement practices are in different product categories, lifestyles, and market conditions. This can provide both theoretical insights into the boundary conditions of engagement frameworks and practical guidance for managers seeking to implement sustainability initiatives in diverse contexts.

While this thesis examined and introduced specific engagement practices, future research could explore the psychological mechanisms and motivational drivers underlying customer engagement for sustainability, including habit formation, moral fatigue, and broader patterns of sustainable engagement. Understanding how sustainable identity evolves and how extrinsic motivation transitions into intrinsic commitment is critical for explaining why some engagement strategies lead to lasting behavioral change, shaping attitudes, motivation, and everyday sustainable behaviors. Perspectives from identity psychology, moral psychology, and self-determination theory could provide a useful lens for understanding these processes.

The intersection of CSR, circularity, and cultural meaning also presents promising opportunities for future research. Scholars could study how brand activism, cultural narratives, and identity signaling influence engagement in sustainability contexts, as well as how customers integrate sustainable practices into self-expression and social belonging. Such insights could expand research on customer engagement by connecting sustainability to cultural and identity-based meaning-making.

At a broader level, future research could address macro-level engagement. Investigating how policy frameworks, collective action platforms, and institutional arrangements influence engagement for sustainability could bridge micro- and meso-level behaviors and system-level transitions. Integrating perspectives from transformative service research and systems theory may provide a deeper understanding of how engagement contributes to societal resilience and sustainable transformation. Such research is essential because sustainability cannot be achieved through individual or firm-level actions alone. Systemic conditions and institutional support are crucial for scaling impact and ensuring the long-term effectiveness of sustainability initiatives.

Relatedly, multi-actor governance in circular ecosystems deserves deeper investigation. Research could examine how actors negotiate shared value, responsibility, and legitimacy in networks that include brands, recyclers, NGOs, and policy makers. Such studies might analyze power asymmetries and trust dynamics in hybrid constellations that blend commercial and social logics. Employing institutional and network theories could advance our understanding of how coordination mechanisms and joint success metrics evolve over time.

Another promising research avenue concerns the role of new technologies in promoting engagement for sustainability. Scholars could explore how immersive technologies, such as virtual and augmented reality (VR and AR), create new sustainability experiences, for instance, through virtual repair workshops or AR-based product storytelling that convey circular

principles and strengthen emotional bonds with brands. Likewise, personalization enabled by artificial intelligence (AI) may increasingly shape how customers engage with sustainability initiatives. As DEPs rely on algorithmic curation to tailor content, rewards, and interactions, examining how such personalization mechanisms influence sustainable engagement can shed light on their effects on motivation, trust, and perceived fairness, as well as on the balance between extrinsic and intrinsic engagement. This also allows exploration of their potential to support long-term commitment to sustainability. For example, future studies could investigate whether AI-driven recommendations encourage enduring circular behaviors or merely trigger short-term participation.

At a methodological level, future research could benefit from a variety of approaches. Studies could combine digital ethnography with social network analysis to explore how engagement practices spread across online and offline environments. Longitudinal or mixed-method designs could track changes in engagement motivations, attitudes, and perceived value over time. Experiments could test the influence of different engagement types, while design-based approaches could help develop and evaluate tools that promote sustainable behavior, such as gamified take-back systems or AI-assisted repair guides.

Finally, collaboration between academic researchers and practitioners should be further strengthened. The empirical parts of this thesis benefited greatly from the steady exchange with industry partners. Future research could adopt participatory action research designs to develop and test engagement strategies in real-time business environments, ensuring both academic rigor and practical relevance.

Appendix: International conference contributions

Dreher, F., & Ströbel, T. (2024). Promoting circularity through co-creation of value among brands and customers – A case study within the sports fashion industry. 53rd European Marketing Association Conference (EMAC), Bucharest, Romania.

Dreher, F., & Ströbel, T. (2024). Co-Creation of Value Among Brands and Customers to Promote Circularity – A Case Study Within The Sportswear Industry. 32nd Conference of the European Association for Sport Management (EASM), Paris, France.