


Corporate Digital Responsibility and the current Corporate Social Responsibility standard: An analysis of applicability



K. Valerie Carl¹ , Timothy Markus Christian Zilcher¹ and Oliver Hinz¹ 

Abstract: Corporate Digital Responsibility (CDR) takes a key role in developing, deploying, and managing digital technologies, products, and services responsibly and ethically. New technologies offer new chances but also expose new threats, especially related to privacy and data security that managers need to cope with. CDR puts privacy and data security attempts in a broader context to provide a more holistic approach to Corporate Responsibilities and to strengthen consumer trust in corporate activities. However, managers still face a lack of CDR guidelines that support the implementation of CDR activities. Existing guidelines related to Corporate Responsibilities, like the ISO standard 26000, provide guidance on Corporate Social Responsibility (CSR) addressing socially responsible and sustainable behaviour. However, current standards do not cover CDR directly. As such, the purpose of this contribution is to evaluate the applicability of the existing CSR standard to CDR to pave the way for CDR standardization in the future.

Keywords: Corporate Digital Responsibility, Digitalization, Ethical Guidelines, Standardization.

1 Introduction

Advancements in digital technologies and an omnipresent digitalization of personal and professional lives allow for networks of devices that communicate via the Internet and perform fully automated tasks without any human interaction. The IoT emerged as an essential building block for many applications and systems. Despite the value creation and innovative technologies, consumers are especially concerned regarding the risks related to privacy and data security. These concerns even deepened due to data breaches and cyber-attacks [Vi19] and lead to a lack of trust. The possible hazard of privacy and security related issues can cause economic, ethical, or legal issues for consumers and firms alike [Ba19]. Prior research suggests that consumers' perception of their data security is critical for Internet or e-commerce technology adoption [Lu02]. To address these uncertainties of digital technologies properly in a more comprehensive way and to support and to promote trust in corporate activities, a guiding framework that supports the ethical and responsible behavior in a digital world is necessary. In this context, the concept of Corporate Digital Responsibility (CDR) is gaining importance. CDR is closely related to the concept of Corporate Social Responsibility (CSR), both subsumed under the umbrella of Corporate Responsibilities. While corporate responsibilities for a company's impact on social and

¹ Goethe University Frankfurt/Main, Chair of Information Systems and Information Management, Theodor-W.-Adorno-Platz 4, D-60323 Frankfurt am Main, Germany, {kcarl, ohinz}@wiwi.uni-frankfurt.de, 
<https://orcid.org/0000-0003-4655-1046> [Carl] /  <https://orcid.org/0000-0003-4757-0599> [Hinz]

economic aspects as well as their consequences is directed in the concept of CSR [MR02], CDR is a derivative of it with regard to digital issues. CDR should give guidance to organizations how to handle potential negative consequences and how to use the opportunities of digitalization. CDR puts, *inter alia*, privacy and data security attempts in a broader context to provide a more holistic approach to corporate responsibilities and to strengthen consumer trust in corporate activities in a digitized world.

Yet, we can observe lively discussions in practice [e.g., He21], governance [e.g., Th17], and research [e.g., Lo21] that address the necessity and conceptualization of CDR. Thus, the theoretical debate on CDR evolves addressing the understanding of CDR and its scope [e.g., He21, Lo21, Mi21]. Nevertheless, practitioners still lack concrete guidance for the implementation of CDR activities compared to activities dedicated to the related concept of CSR (*i.e.*, ISO 26000). While the ISO 26000 is a well-known guidance for the implementation of CSR in corporate practice there is still no equivalent standard covering CDR despite the already advanced digitalization. Considering the already omnipresent risks and challenges caused by the ongoing digitalization, CDR guidance as a standard is needed. To the best of our knowledge, no previous research evaluated the applicability of the related CSR standard to the context of CDR. Thus, goal of this publication is to evaluate the need for adjustments to the current CSR standard, consequently the transformation into a superordinate Corporate Responsibility standard. Otherwise, there might be a need for the development of a separate standard to adequately address the topic of CDR.

CDR implements guidelines for the company's interaction with several stakeholder groups including, e.g., shareholders, employees, consumers, or the society itself [Lo21]. As various stakeholder groups do not always share the same interests, the guidelines CDR provides might not fit all stakeholder groups equally well. Consequently, the applicability evaluation of the ISO 26000 to the context of CDR focuses on business-to-consumer companies and their activities aiming at consumers. Hence, we pave the way for the standardization of CDR and provide guidance on the implementation of CDR in corporate practice. Following, the next section provides a definition of CSR and CDR. Section 3 then assesses the applicability of the CSR standard to CDR. Finally, we discuss the necessity of a specific CDR standard, this study's implications, and future research paths.

2 Corporate Social and Digital Responsibility

CSR and CDR are correlated and both part of Corporate Responsibilities, however research and practice should focus separately on CDR as it addresses the specific risk and challenges of the currently unfolding digitalization [e.g., Lo21]. CSR describes the responsibility of companies to align themselves with the expectations, goals, and values the society and stakeholders have. According to CSR, companies should take the economic, social, and ecological consequences of their actions into account [Ag11] and provide improvement to the quality of life by taking social responsibility. While organizations must follow legal obligations (*i.e.*, regulations, laws) when offering products or services, CSR

intends them to align their behavior with ethically responsible conduct according to “what is right, just and fair, even when they are not obliged to by the legal framework” [MM07, p.337]. Consequently, voluntariness to improve the social well-being of stakeholders affected by the company’s economic activities is at the core of CSR [Fr18]. CSR activities can also support corporate interests [Wi21] and are applicable to all sizes, industries and types of companies [Fr18]. The degree and type of CSR implementation varies and depends on the influence of, e.g., stakeholders, regulations, or applicable standards.

In 2010, the International Organization for Standardization published the ISO standard 26000 “Guidance on social responsibility”. Despite its non-certifiability, this standard should serve as a guideline for organizations to act within the purpose of social responsibility and contribute to their sustainable development. These guidelines are applicable to organizations of all types. According to the ISO 26000, social responsibility should be an integral part of a company’s core strategy. The central attribute of social responsibility is an organization’s initiative to integrate social and environmental considerations into its decision-making process and to be accountable for the impact of its decisions and activities on society and the environment. Therefore, organizations have to identify stakeholders, and take their interest and expectation into account. The CSR standard aims to encourage organizations to go beyond compliance with the law, making it a fundamental duty of any organization and an essential part of its social responsibilities. Hence, ISO 26000 demands both transparent and ethical behavior that contributes to a sustainable development. In summary, firms should integrate CSR throughout the organization, their relationships, and regarding stakeholders’ interests.

CDR is an independent concept that complements the principles of CSR by addressing the challenges and peculiarities of a digitized world [Lo21]. To this end, CDR puts associated risks of digital technologies, e.g., privacy and data security issues, in a broader context to provide a more holistic approach to Corporate Responsibilities and to strengthen consumer trust in corporate activities in a digitized world. Despite growing research efforts on CDR and its conceptualization [e.g., He21, Lo21], to the best of our knowledge, no previous research evaluated the applicability of the established CSR guidance to the context of CDR. Hence, this work lays the foundation for future research on CDR and a potential standardization of the concept by evaluating the status-quo of research concerning CDR and the applicability of a current standard related to Corporate Responsibilities (i.e., ISO 26000). In the past, the CDR debate brought up an approach consisting of eight dimensions to describe CDR and the concept’s scope [Th17]: (i) access, (ii) dispute resolution and awareness, (iii) economic interests, (iv) education and awareness, (v) governance and participation, (vi) information and transparency, (vii) privacy and data security, and (viii) product safety and liability. Some (national) regulations, like the GDPR, already cover distinct sub-fields of CDR. Nevertheless, CDR activities exceed the legally binding (national) minimum requirements and rather describes the voluntary acceptance of additional responsibilities. In countries that already require compliance with high standards, e.g., with respect to privacy and data security, activities related to CDR require higher levels of voluntary responsibility than in countries with lower legal standards. Thus, the activities relatable to CDR vary between different countries as the legal requirements always specify

the minimum level. However, since the concept of CDR applies worldwide, the concept sets country-independent minimum standards, which may be tightened by national laws.

3 Applicability of the CSR standard to the context of CDR

Aim of this study is to evaluate whether the existing CSR standard, ISO 26000, is applicable to the context of CDR to form a superordinate Corporate Responsibility standard. Thus, we assess the current coverage of peculiarities of CDR, possible adjustments for adequate coverage, and the need for extensive additions to the CSR standard. This paves the way for the potential standardization of CDR and thus easy guidance for companies on how to implement CDR in practice. The evaluation grounds on eight dimensions of CDR [Th17] and associated sub-dimensions derived from theory and practice.

3.1 Access

Companies can support consumers' *access* to (basic) digital technologies, products, and services. Especially in a digitized world, *access* gains tremendous importance [DT21]. The CDR dimension *access* covers *physical* and *mental access*.

Physical access refers to the ability of individuals to physically access technologies. Hence, organizations can facilitate and enable safe access to digital technologies, products, and services. The CSR standard includes the demand for the dissemination of technologies, reasonably priced technologies, and preserving access in the event of a non-payment. However, issues not covered are specifics such as access to hardware, software, and Internet connection, which represent important parts of this sub-dimension.

Mental access includes corporate practices that increase consumers' prior knowledge and facilitate usage. The CSR standard requests firms to strengthen consumer knowledge generation. However, further explanations on consumers' prior knowledge and mental usage requirements are missing and would need a detailed representation.

Summing up, the CSR standard covers important areas of the dimension *access* but it lacks more extensive issues related to both sub-dimensions. For example, Internet access and ease of use should complement the existing standard. However, there is a possibility to widen the focus of the CSR standard to cover this dimension appropriately.

3.2 Dispute resolution and awareness

Dispute resolution and awareness presents another dimension of Corporate Responsibilities in the digital context. Companies can implement adequate mechanisms for resolving consumer complaints and potential redress for harm endured from transactions [CV16]. Correspondingly, CDR proposes an adequate way of *contact* regarding dispute resolution and redress for consumers, as well as a fair handling *process*.

Regarding the first *contact*, the CSR standard formulates the obligation to provide information to consumers in order to ensure a transparent and accessible process. Hence, the CSR standard contains an obligation for companies to enable easy accessibility of mechanisms, e.g., when complaints occur. Besides, the CSR standard specifies that dispute resolution should involve no or minimal costs for consumers and should proceed without waiving their rights. When consumers file for a complaint, the procedure should be simple and easily accessible (e.g., in terms of language, education, distance, physical and mental limitations). Consequently, this CDR sub-dimension is widely covered.

The second sub-dimension concerns the *process* of dispute resolution and dealing with complaints. The CSR standard requires the handling of a complaint according to a specified system and within a predictable period. Further should this *process* deviate from court procedures but the standard prohibits the circumvention of legal regulations. As such, it incorporates a fundamental principle of Alternative Dispute Resolution methods, which are particularly relevant in the digital environment. Consequently, the CSR standard widely covers this sub-dimension of CDR. However, consumer orientation lacks, which means to exhaust all options for solving the problems with consumers. Further, a focus on Online Dispute Resolution mechanisms is missing which seems particularly appropriate for dealing with complaints in the course of digital transactions.

Summing up, most of the requirements of *dispute resolution and awareness* are included in the CSR standard. However, peculiarities concerning the dispute handling *process* in the digital context are missing. Hence, there is a need to strongly develop and add to the existing CSR standard to cover this CDR dimension extensively.

3.3 Economic interests

The digital context can reinforce the mismatch between the interests of consumers and companies. Following the principles of CDR, firms protecting consumers' *economic interest* also protect their own future profits. Hence, this dimension covers, e.g., fair *competition* policies [e.g., Ra16], *pricing* [e.g., HHS11], or *interoperability* [e.g., Le13].

A functioning *competition* represents the idea of a competition, which enables the market mechanism to function optimally. The CSR standard notes the importance of functioning *competition* for innovation, cost efficiency, equity, economic growth, and standard of living. Therefore, companies should not engage in anti-competitive behavior to achieve an unfair competitive advantage and rather obey competitive law. In contrast, the CSR standard lacks mentioning monopolistic structures that are fundamentally opposed to functioning competition. With regard to digital markets, the reference to problems of market definition and the determination of market shares is missing. Besides, there is no legal consideration of network effects. However, network effects describe the changed value of a market or platform due to an additional market user and represent an important factor for companies, especially in the digital context [HOS20].

The second sub-dimension refers to *pricing*. In particular, price discrimination occurs

when firms charge different prices for the same product or service of the same quality [HHS11]. The CSR standard predicates that any distinction between people that results in an impairment of equal treatment should be avoided. This includes differentiating prices over time, between consumers, and between circumstances. However, there is a lack of more concrete evidence on the problem of price discrimination.

The sub-dimension *interoperability* refers to the ability of different systems, techniques, or organizations to work together, using a common technical standard. The current CSR standard does not cover this sub-dimension even though it contributes to avoid lock-in effects and therefore protect consumers' *economic interests*.

Concluding, even though the CSR standard widely covers the sub-dimension referring to *competition* except for monopolistic structures and network effects, the sub-dimensions of *pricing* and *interoperability* need broader coverage in the CSR standard. The implementation is partially lacking and without the integration of these sub-dimensions, an application of the current CSR standard to the concept of CDR is inconceivable.

3.4 Education and awareness

Education and awareness covers a broad range of application fields, e.g., consumer awareness regarding social, economic, and ecological consumption consequences [Th17]. The enhancement of more sophisticated digital technologies (e.g., blockchain technology) amplifies consumers' need for education. Hence, CDR encourages companies to *educate consumers* also raising their *awareness* for consumption consequences.

The first sub-dimensions refers to *consumer education* and should help consumers make informed consumption decisions. The CSR standard already requires firms to provide information to consumers to enable informed, responsible consumption decisions with knowledge of their rights and obligations. The CSR standard states that companies should foster *consumer education*, paying attention to the increased needs of disadvantaged (e.g., economic) consumer groups. *Consumer education* topics include, e.g., product safety, price and quality of products, and sustainability. Consequently, the CSR standard covers far-reaching parts of this sub-dimension. However, there is a lack of specified *consumer education* measures in different consumption stages.

Besides conventional *consumer education*, the second sub-dimension *awareness* aims to create consumer awareness of environmental, social, and economic consequences of consumption. The current CSR standard states that *awareness* is about paying attention to the impact of consumption decisions on other market participants, as well as on the common good, as opposed to simply pursuing individual interests.

These CDR sub-dimensions coincide almost completely with principles already covered by the CSR standard. However, there is need for alignment regarding the specification of the timing of *consumer education* measures (i.e., before, after, or during service).

3.5 Governance and participation

The dimension *governance and participation* entails adequate corporate participation mechanisms [Th17]. This CDR dimension consists of three sub-dimensions: *consumer feedback*, *consumer organization involvement*, and *product development*.

The sub-dimension *consumer feedback* covers requirements for companies to respond to the concerns expressed by consumers. These requirements include facilitating consumer-focused employee behavior, providing social skills training, and creating a pleasant corporate culture to encourage consumer feedback. However, a detailed guidance on the development of these capabilities and the design of feedback mechanisms lacks.

The CSR standard currently does not cover the sub-dimension related to *consumer organization involvement*. Consumer organizations advocate for the interests of private consumers and provide information on matters of private consumption. Thus, companies should survey representative groups of the community on business issues and participate in local forums, however a specific reference to consumer organizations lacks. Hence, there is a need for amendments advising firms to incorporate *consumer organizations*.

In almost the same manner, the CSR standard lacks references to the sub-dimension *product development*. *Product development* describes the process of creating a product, starting with the analysis of future trends and the incorporation of consumer needs up to the market launch. Although the CSR standard advises to include stakeholder groups' opinions, there is no mention of concrete participation in terms of *product development*. Further, the CSR standard could distinguish between opportunities for participation at different stages of the *product development* process. Besides, relevant methods related to crowdsourcing and similar digital possibilities lack.

In summary, the topic of *consumer feedback* is already part of the current CSR standard. Nevertheless, the CSR standard should exceed coverage related to employee behavior and a concretization of feedback mechanisms. The other two sub-dimensions are almost completely absent in the CSR standard. Accordingly, extensive additions would be necessary here so that the existing CSR standard also covers the CDR concept.

3.6 Information and transparency

Information and transparency are prerequisites for informed decision-making, therefore anticipated by consumers. This dimension addresses several application scenarios, e.g., the product scope, ecological footprint, or pricing [GGK10].

The provision of information to consumers about products, services, and measures taken by the company forms the sub-dimension *information*. The CSR standard already covers the required disclosure of truthful and unbiased information about products, services, terms and conditions, impacts on society, the economy, and the environment. Provided

information should be complete and understandable to enable informed consumption decisions. Yet, the CSR standard already covers an extensive part of the *information*-related CDR issues. Nevertheless, a concrete request for adequate information on data protection agreements and the link to specific issues in the digital context are missing.

The sub-dimension *transparency* fosters transparency of information. The CSR standard specifies that companies should disclose information about their decisions, behaviors, and potential social impacts. Hence, the CSR standard meets the fundamental requirement of *transparency*. However, it does not contain any more specific provisions, e.g., related to transparency of revenue generation—peculiarities of the digital context.

Concluding, the current CSR standard already addresses large parts of the *information and transparency* sub-dimensions, but the obligation to provide *information* specific to the digital context (e.g., digital business models, data protection agreements) lacks. To cover this CDR dimension a more far-reaching focus of the CSR standard is necessary.

3.7 Privacy and data security

Data privacy covers consumers' ability to control their data, whereas *data security* implies the protection of data against possible risks [BC11]. Hence, the concept of CDR fosters the protection of *privacy and data security* exceeding regulations voluntarily.

The responsible handling of data in terms of collecting and using data forms the sub-dimension of *privacy*. The CSR standard acknowledges the increased importance of personal data as a resource for digital products and services in the context of larger databases and digital communication technologies. It demands the consent of consumers at the time of data collection. Besides, the CSR standard covers the responsible and restricted use. To provide a more detailed evaluation of this CDR dimension, we employ an established framework, the six privacy protection goals, articulated by Hansen et al. [HJR15] to systematically assess the current coverage of the CSR standard regarding this CDR sub-dimension. While having slight overlap with the CSR standard, the six privacy protection goals address two further fields: *unlinkability* states, inter alia, that data protection relevant data cannot be linked across domains and *intervenability* describes the possibility of intervening in ongoing or planned data processing operations relevant to data protection. Both represent important privacy goals, which are worth considering including in the CDR standard. Hence, the CSR standard partly covers *data privacy*. Nevertheless, extensive amendments are needed to cover this topic in the digital context.

Besides, the CSR standard partly covers the second sub-dimension *data security* and requires appropriate security mechanisms, ensuring the protection of personal data. Yet, the CSR standard only implements basic aspects of *data security*. More far-reaching regulations such as potential physical security risks due to unauthorized access to personal data, security risks of data mining with regard to personal information, or recommendations for actions to avoid cyber-attacks remain unmentioned. Besides, a reference to other standards

such as the ISO 27000 series dealing more concretely with the subject of information security to cover the topic of CDR more appropriately lacks.

Hence, the current CSR standard covers *data privacy* for digital technologies superficially. However, while there are basic references to appropriate security mechanisms and privacy, concrete guidance for more *privacy and data security* lacks. Accordingly, far-reaching additions are necessary to represent this CDR dimension appropriately.

3.8 Product safety and liability

The dimension of *product safety and liability* addresses safe operations and the firm's liability in case of potential injuries (i.e., physical and mental harm). The digital context also makes it difficult to trace the damage back to its source [Sm17]. Consequently, the concept of CDR requires firms to protect consumers' *safety* from mental and physical risks also providing adequate *liability* and accountability in case of harm.

The first sub-dimension *product safety* deals with regulations on the safety of consumer products. The CSR standard states that companies should foster safe product operation and provide information on the safe use of products and services, both for proper and the expected improper use. Besides, the CSR standard requires firms to anticipate and remedy further potential risks and hazards. Nevertheless, the CSR standard has substantial gaps with regard to the *safety of digital products*. In particular, the CSR standard does not meet the challenges of *product safety* specific to the digital context like social media.

The second sub-dimension deals with *product liability*. According to the CSR standard, *product liability* refers to liability for compensations against the manufacturer for damage caused to the end user because of a defective product. Further, it also concerns the accountability for potential (human) rights violations. However, calls for accepting additional responsibilities in the sense of liability and specific requirements for internal company liability regulations are missing. In terms of digital products and services the consideration of *liability*-specific challenges such as intelligent algorithms, are not addressed. In addition to digital products and services, the CSR standard lacks *liability* regulations covering physical products sold via digital intermediary platforms.

Summing up, the CSR standard covers the requirement of *product safety* in general. Not covered is the *product safety and liability* in the specific digital context. Thus, there is a need for an extensive addition to the CSR standard or the establishment of an own standard to adequately address this CDR dimension and the peculiarities of the digital context.

4 Conclusion

Aim of this study is to evaluate whether the current standards and norms addressing Corporate Responsibilities are applicable to the context of CDR. Hence, we examined the

coverage of CDR dimensions by the ISO standard 26000, a standard providing guidance on CSR. ISO 26000 already addresses some of the CDR dimensions. However, ISO 26000 only focuses on corporate activities and consumer interaction in general. Still, the digital context poses peculiarities that exceed previous responsibilities [e.g., Lo21, Mi21] and the current CSR standard by far. Hence, Corporate Responsibilities within the digital context should receive an extended connotation that exceeds the understanding of CSR. Consequently, taking into account the detailed insights on the coverage of each of the eight CDR dimensions and the overall evaluation of applicability, this study suggests developing a CDR standard comparable to ISO 26000 that addresses the peculiarities and unique challenges of a digitized world. Alternatively, the standard 26000 would need to be extended extensively to include specific instructions to cover the digital context. However, since previous research recommends considering CDR and CSR as separate concepts [e.g., Lo21], one could better account for the specifics of the digital context by also developing two related, partially overlapping, but separate standards.

Consequently, this publication makes several theoretical contributions. Firstly, this study presents the concept of privacy and data security in the broader context of Corporate Responsibilities. Hence, this research adopts a broader approach to privacy and data security than numerous other research endeavors, motivating research on both as distinct topics. Secondly, this publication advances the current research base related to CDR by providing an in depth understanding of the scope of each CDR dimension. Research on CDR is still in its infancy [e.g., Lo21]. Therefore, it is of tremendous importance to develop consensus on the scope of CDR and its associated dimensions to pave the way for the standardization of the concept, thus providing guidance on the implementation of CDR. Hence, this publication intends to enhance the discourse on the understanding of CDR to support future standardization. Thirdly, this research contributes to the understanding of potential overlaps and divergences between the concepts of CSR and CDR.

From a practical point of view, this research translates the theoretically derived concept of CDR [e.g., Lo21] to corporate practice. This paper offers practitioners guidance for the implementation of CDR in practice, and hence how to address consumer trust issues related, e.g., to privacy and data security. Thus, the scope and applicability analyses serve as a first orientation for practitioners aiming at the implementation of CDR in their companies. Besides, this research should ignite the discussion on how to develop a standard that addresses CDR and its dimensions adequately. To this end, we provide a first assessment on the applicability of the current CSR standard, possible additions so that CDR can be covered, and the evaluation of a potential standard of its own. Based on the derived assessment, we suggest establishing a specific standard that addresses CDR and the peculiarities of the digital context. Hence, this research contributes to the solidification of CDR in corporate practice and a future standardization. Such a standardization can provide additional guidance for firms on how to implement CDR and corroborates a common view of the definition and conceptualization of CDR.

Despite our best efforts, this study is not without limitations. Firstly, this study focuses on one CSR standard, ISO 26000. To assess the applicability of a commonly used standard

in detail, this focus was necessary. Besides, there is no consensus in research nor practice on one framework describing the scope of CDR albeit sharing core values and a common understanding. However, we encourage future research to assess the applicability of other standards and norms related to Corporate Responsibility, also incorporating further CDR frameworks. Secondly, a focus on the interaction of firms with one specific stakeholder group was necessary. Nevertheless, CDR addresses several stakeholder groups like employees or society in general. Consequently, we motivate future research to address this gap and to assess the applicability of current standards on these aspects of CDR. The limitations again highlight the need for consensus on the nomenclature and scope of CDR. Despite its shortcomings, this research made a first step towards the standardization of CDR and thus supported the establishment of the concept in practice.

Acknowledgement

This work has been supported by the Hessian State Chancellery – Hessian Minister of Digital Strategy and Development under the promotional reference 6/493/71574093 (CDR-CAT).

Bibliography

- [Ag11] Aguinis, H.: *Organizational Responsibility: Doing Good and Doing Well*. APA Handbook of Industrial and Organizational Psychology, Vol 3: Maintaining, Expanding, and Contracting the Organization. American Psychological Association, Washington, DC, US, pp. 855-879, 2011.
- [Ba19] Baumann, A.; Haupt, J.; Gebert, F.; Lessmann, S.: *The Price of Privacy: An Evaluation of the Economic Value of Collecting Clickstream Data*. *Business & Information Systems Engineering* 61/4, pp. 413-431, 2019.
- [BC11] Bélanger, F.; Crossler, R. E.: *Privacy in the Digital Age: A Review of Information Privacy Research in Information Systems*. *MIS Quarterly* 35/4, pp. 1017-1041, 2011.
- [CV16] Clifford, D.; Van Der Syde, Y. S.: *Online Dispute Resolution: Settling Data Protection Disputes in a Digital World of Customers*. *Computer Law & Security Review* 32/2, pp. 272-285, 2016.
- [DT21] Díaz Andrade, A.; Techatassanasoontorn, A. A.: *Digital Enforcement: Rethinking the Pursuit of a Digitally-Enabled Society*. *Information Systems Journal* 31/1, pp. 184-197, 2021.
- [Fr18] Frederick, W. C.: *Corporate Social Responsibility: From Founders to Millennials*. *Corporate Social Responsibility, Business and Society* 360. Vol. 2. Emerald Publishing Limited, Bingley, pp. 3-38, 2018.
- [GGK10] Granados, N.; Gupta, A.; Kauffman, R. J.: *Research Commentary—Information Transparency in Business-to-Consumer Markets: Concepts, Framework, and Research Agenda*. *Information Systems Research* 21/2, pp. 207-226, 2010.

- [He21] Herden, C.; Alliu, E.; Cakici, A.; Cormier, T.; Deguelle, C.; Gambhir, S.; Griffiths, C.; Gupta, S.; et al.: “Corporate Digital Responsibility”: New Corporate Responsibilities in the Digital Age. *Sustainability Management Forum* 29, pp. 13-29, 2021.
- [HHS11] Hinz, O.; Hann, I.-H.; Spann, M.: Price Discrimination in E-Commerce? An Examination of Dynamic Pricing in Name-Your-Own Price Markets. *MIS Quarterly* 35/1, pp. 81-98, 2011.
- [HJR15] Hansen, M.; Jensen, M.; Rost, M.: Protection Goals for Privacy Engineering. 2015 IEEE Security and Privacy Workshops. IEEE Computer Society, pp. 159-166.
- [HOS20] Hinz, O.; Otter, T.; Skiera, B.: Estimating Network Effects in Two-Sided Markets. *Journal of Management Information Systems* 37/1, pp. 12-38, 2020.
- [Le13] Lewis, G. A.: Role of Standards in Cloud-Computing Interoperability. Proceedings of the 46th Hawaii International Conference on System Sciences (HICSS). IEEE Computer Society, Wailea, Maui, HI, U.S., pp. 1652-1661, 2013.
- [Lo21] Lobschat, L.; Mueller, B.; Eggers, F.; Brandimarte, L.; Diefenbach, S.; Kroschke, M.; Wirtz, J.: Corporate Digital Responsibility. *Journal of Business Research* 122, pp. 875-888, 2021.
- [Lu02] Luo, X.: Trust Production and Privacy Concerns on the Internet: A Framework Based on Relationship Marketing and Social Exchange Theory. *Industrial Marketing Management* 31/2, pp. 111-118, 2002.
- [Mi21] Mihale-Wilson, A. C.; Zibuschka, J.; Carl, K. V.; Hinz, O.: Corporate Digital Responsibility – Extended Conceptualization and a Guide to Implementation. European Conference on Information Systems (ECIS) 2021, Marrakech, Morocco, 2021.
- [MM07] Matten, D.; Moon, J.: Pan-European Approach: A Conceptual Framework for Understanding CSR. In (Zimmerli, W. C.; Richter, K.; Holzinger, M. eds.): *Corporate Ethics and Corporate Governance*. Springer, Berlin, pp. 404-424, 2007.
- [MR02] Maignan, I.; Ralston, D. A.: Corporate Social Responsibility in Europe and the U.S.: Insights from Businesses’ Self-Presentations. *Journal of International Business Studies* 33/3, pp. 497-514, 2002.
- [Ra16] Ransbotham, S.; Fichman, R. G.; Gopal, R.; Gupta, A.: Special Section Introduction—Ubiquitous IT and Digital Vulnerabilities. *Information Systems Research* 27/4, pp. 834-847, 2016.
- [Sm17] Smith, B. W.: Automated Driving and Product Liability. *Michigan State Law Review* 2017/1, pp. 1-74, 2017.
- [Th17] Thorun, C.; Vetter, M.; Reisch, L.; Zimmer, A. K., https://www.bmjv.de/G20/DE/ConsumerSummit/documents/Downloads/Studie.pdf?__blob=publicationFile&v=1, accessed: 09/07/2019.
- [Vi19] Vial, G.: Understanding Digital Transformation: A Review and a Research Agenda. *The Journal of Strategic Information Systems* 28/2, pp. 118-144, 2019.
- [Wi21] Wickert, C.: Corporate Social Responsibility Research in the Journal of Management Studies: A Shift from a Business-Centric to a Society-Centric Focus. *Journal of Management Studies* 58/8, pp. E1-E17, 2021.