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Toward organizational integrity measurement: Developing a theoretical model of organizational integrity

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Abstract

Organizational integrity is a key concept with and through which a company can assume its responsibility for ethical and societal issues. It is a basic premise for sustainable corporate success, as ethical risks ultimately become economic risks for a company. Recent research shows the potential of integrity-based governance models to reduce corporate risks and to improve business performance. However, companies are not yet able to assess nor evaluate their level of organizational integrity in a sound and systematic way. We aim to develop a theoretical model as a basis for the measurement of organizational integrity by conceptualizing the construct and sizing the theoretical model's scope. We suggest that the theoretical model follows a holistic approach and involves three types of dimensions: prerequisite dimensions, independent dimensions, and dependent dimensions. The organizational integrity triad—consisting of active commitments to self-imposed norms and principles, their transparent institutionalization into corporate processes and structures, and their implementation into action—plays a key role in this context.

1 | INTRODUCTION

The board of management oversight role has advanced in recent decades because companies are becoming more complex; thus, company failures have more extensive impact and consequences on multiple stakeholder groups. Amid the growing power of companies in society, corporate governance has become an object of broad public interest (Paine & Srinivasan, 2019). According to group agent theory (List & Pettit, 2011), a company bears responsibility not only over its members but also beyond.[1] In fact, companies bear responsibility for ethical and societal issues, such as human rights, climate change, and poverty—just to name a few. The organizational integrity construct is a key concept with and through which a company can assume this very responsibility.[2]

Moreover, Fuerst and Luetge (2021) argued that organizational integrity is a basic premise for corporate success. Integrity-based actions result (among others) in fundamental trust that is essential for a healthy and sustainably profitable company in the long run. Ethical risks ultimately become economic ones (Fuerst & Luetge, 2021). An obvious question that arises—at least from a board of management perspective in its oversight role—is how organizational integrity can become an integral part of corporate governance. Recent research approaches show the potential of integrity-based governance models to reduce corporate risks and to improve business performance (Arjoon, 2017; Cameron et al., 2004; Fuerst & Luetge, 2021; Hajduk & Schank, 2017; Laufer, 2006; Menzel, 2005). Indeed, developments in practice indicate that integrity-based governance models are becoming a vital part of corporate risk management as related research gains attention (e.g., Arjoon, 2017; Brink, 2017; Calderón et al., 2018). Simultaneously, practice also shows that merely compliance-based governance models are reaching their limits: In 2008, the subprime mortgage crisis, for example, caused Lehman Brothers to apply for insolvency. In 2015, the Diesel emission scandal severely disrupted the entire Volkswagen Group; courts are still handling compensation cases to this day. Many such examples of varying magnitude can be found at the international level. What they have in common is the aftermath: Integrity-based governance models are needed in a more substantiated concreteness than has been to date (e.g., Arjoon, 2017; Brink, 2017).

How does a company manage organizational integrity? While integrity-based corporate governance is gaining attention, companies are not yet able to assess nor evaluate their level of organizational integrity in a sound and systematic way as a conceptualization of the construct and a holistic theoretical model are lacking. By calling for a holistic theoretical model, we refer to a holism understanding coined by Smuts (1926). Accordingly, a holistic approach refers to the whole of something or to the overall system rather than just its parts. It is characterized by interconnected parts that can only be explained in relation to the whole. A holistic theoretical model, in fact, could help companies take on responsibility as group agent by serving as a new, complementary approach in corporate governance. In addition, effectiveness assessments of respective activities and benchmarking could become possible in tandem.

The aim of this article is to develop a theoretical model as a basis for the measurement of organizational integrity by conceptualizing the ethical construct and sizing the scope of the corresponding theoretical model. The aim of this article is not to develop a ready-to-implement measurement approach with scale items. Accordingly, we aim to respond to two guiding questions: First, what would a theoretical model of organizational integrity look like? Second, can organizational integrity be measured (at all)? We start this article with a brief literature review of existing measurement approaches in the organizational context of integrity—from a positive organizational scholarship perspective and virtue ethical perspective. We then lay the theoretical foundation consisting of a construct definition and three theories that build the groundwork for construct conceptualization. Hereafter, we elaborate on our first guiding question of what a theoretical model of organizational integrity can look like. Finally, with regard to our second guiding question and considering the controversial debate on measurement in general, we provide fundamental considerations for when measurement—in general and in specific ethical concepts—might be legitimate. We conclude this article with practical implications and implications for future research.

2 | LITERATURE REVIEW

Our literature review considers the positive organizational scholarship perspective as well as the virtue ethical perspective as these are the two main research domains that study and examine the organizational integrity construct. Positive organizational scholarship studies the construct with an (mostly) empirical methodology. Virtue ethics examines the construct with a (mostly) conceptual approach and involves the roots and origin of the construct because integrity is a virtue.[3] Both research domains are relevant and necessary when developing a theoretical model as the basis for construct measurement.

When it comes to the measurement of integrity in a business context, we see two different levels of analysis: the organizational level and the individual (mainly managerial) level.[4] Although the scope of this article is located at the organizational level, we also give a brief overview of the major measurement scale streams at the individual level because these account for most existing measurement approaches. We also consider measurement scales that aim to measure organizational virtuousness or managerial virtues[5] and that include integrity as one scale item.

2.1 | Organizational level of analysis

At an organizational level of analysis, a sound measurement instrument is rare. Kaptein and Avelino (2005) presented the first study regarding organizational integrity in the workplace of the US workforce. The study illustrates how the construct can be measured via a primarily survey-based approach and presents relevant dimensions. Key dimensions for analysis are as follows: (1) the presence of codes (e.g., code of conduct), (2) the presence and quality of compliance programs, (3) the way codes and programs are embedded in and reinforced by corporate culture and structures, (4) the occurrence of unethical conduct, and (5) the impact of unethical conduct on the company itself and its stakeholders (Kaptein & Avelino, 2005). Although this study considers the organizational context like structures, policies, processes, and

culture, primarily individual behavior within the organization is measured rather than organizational behavior. Yet, the latter is our intention.

Besides, various measurement systems concerning positive organizational virtuousness exist where integrity is one dimension or scale item among multiple ones (see, e.g., Bright et al., 2006; Cameron et al., 2004; Chun, 2005). For example, the *virtue ethical character scale for organizations* by Chun (2005) identified six dimensions of organizational virtues or the organization's character. One of these dimensions is the integrity dimension. It consists of four items that are assessed using a 5-point Likert scale: (1) honest, (2) sincere, (3) socially responsible, and (4) trustworthy. When answering the questionnaire, the respondents were asked to imagine the company as a person with character traits (items). Then, they were asked to rate these items on a 5-point Likert scale from (1) *strongly disagree* to (5) *strongly agree*. Cameron et al. (2004) developed a scale to measure organizational virtuousness from a positive psychology perspective. The scale consists of five factors, one of which is the integrity factor and assessed using three associated items. The respondents were members of the company evaluating its characteristics. The three integrity items are as follows: (1) "Honesty and trustworthiness are hallmarks of this organization," (2) "This organization demonstrates the highest level of integrity," and (3) "This organization would be described as virtuous and honorable" (Cameron et al., 2004, p. 778).

2.2 | Individual level of analysis

At a personal level of analysis, leaders' integrity and leadership integrity are the main subjects of existing literature (see, e.g., Craig & Gustafson, 1998; Davis & Rothstein, 2006; McCann & Holt, 2009, 2013; Prottas, 2008; Simons, 2002; Thoms, 2008). Craig and Gustafson (1998) developed and initially validated an instrument for assessing employee perceptions of leaders' integrity—the *Perceived Leader Integrity Scale*. It consists of 31 items.[6] Respondents were asked to indicate how well each item describes their immediate supervisor on a 4-point scale. Simons (2002, p. 19) developed a conceptual model of behavioral integrity which is "the perceived pattern of alignment between an actor's words and deeds." Here also, different measurement systems concerning managerial virtues exist where integrity is one scale item among multiple (see, e.g., Riggio et al., 2010; Shanahan & Hyman, 2003; Whetstone, 2003).

To summarize, we have identified two major levels of analysis—the individual level and the organizational level. Our work is to be located at the latter, thus attempting to focus on organizational behavior. Here, existing measurement approaches face three main challenges: First, although considering the organizational context like structures, policies, processes, and culture, it is mostly individual behavior within an organization that is measured. Second, underlying theoretical models focus not precisely on the organizational integrity construct but on organizational virtue or managerial virtues (both are broader concepts). Third, when survey methodology is used, it is not assured that the respondents among each other have the same understanding of the construct when answering the questionnaires.

3 | THEORETICAL FOUNDATION

A premise for developing a theoretical model for organizational integrity as the basis for construct measurement is a profound construct definition. Second, we introduce three

theories—theory of incomplete contracts, stakeholder theory, and the pyramid of corporate social responsibility (CSR)—that build the groundwork for construct conceptualization.

3.1 | A definition of organizational integrity

The organizational integrity construct comes with a broad range of interpretations in literature and practice. While some interpretations refer to an individual level and, for example, concentrate on the behavior of managers and employees, other interpretations refer to an organizational level and emphasize corporate structures and compliance systems (see, e.g., Becker, 1998; Brown, 2006; Collier, 1995; Maak, 2008; Moore, 2015; Paine, 1994, 2014; Palanski et al., 2011; Solomon, 1992a, 1992b; Tullberg, 2012). Furthermore, while some references state that organizational integrity manifests itself in organizational behavior, others say that organizational integrity is something that a company possesses (see, e.g., Solomon, 1992a, 1992b). Fuerst and Luetge (2021) defined the organizational integrity construct and go beyond the descriptive level. First, they elaborated on the construct's origin, which is found at an individual level, using an Aristotelean approach. Second, they elaborated on the application to the organizational level using agency theory and arguing that companies are moral agents[7]; thus, the personal integrity construct can be applied at the organizational level as well. This definition provides the basis for our attempt to design the theoretical model.

> Organizational integrity is the integral ability of a company to practice self-fidelity in the sense that its activities are based upon an internally consistent framework of principles and reflects to which extent self-legislated norms and legal standards in force are implemented into organizational actions. A certain maturity is required regarding the company's infrastructure, its CID [corporate internal decision] structures. Organizational integrity includes the ability to self-evaluate and incorporates awareness of both its own organizational strengths and weaknesses, resulting in the ability to further mature (in the sense of further develop). Finally, organizational integrity is in need of desirable moral principles like legal compliance, honesty, and respect.
>
> (Fuerst & Luetge, 2021, p. 6)

Accordingly, organizational integrity is not so much a corporate character trait but rather manifests in corporate behavior and actions. To simplify and operationalize this definition, Fuerst and Luetge (2021) delineated three (closed) stages, which we call the *organizational integrity triad*[8] in the following. Figure 1 shows the organizational integrity triad consisting of (1) the active commitments to self-imposed norms and principles, (2) the transparent institutionalization of these commitments into corporate internal processes and structures, and (3) the assurance of commitment implementation into actions. The organizational integrity triad assists in a holistic construct definition as the three manifestation degrees of organizational integrity are interrelated, but only as a whole do they constitute organizational integrity.

Three questions might arise in the context of the organizational integrity triad: First, when is a commitment a commitment? Second, when is a commitment transparently institutionalized? Third, do all commitments have to be transparently institutionalized?
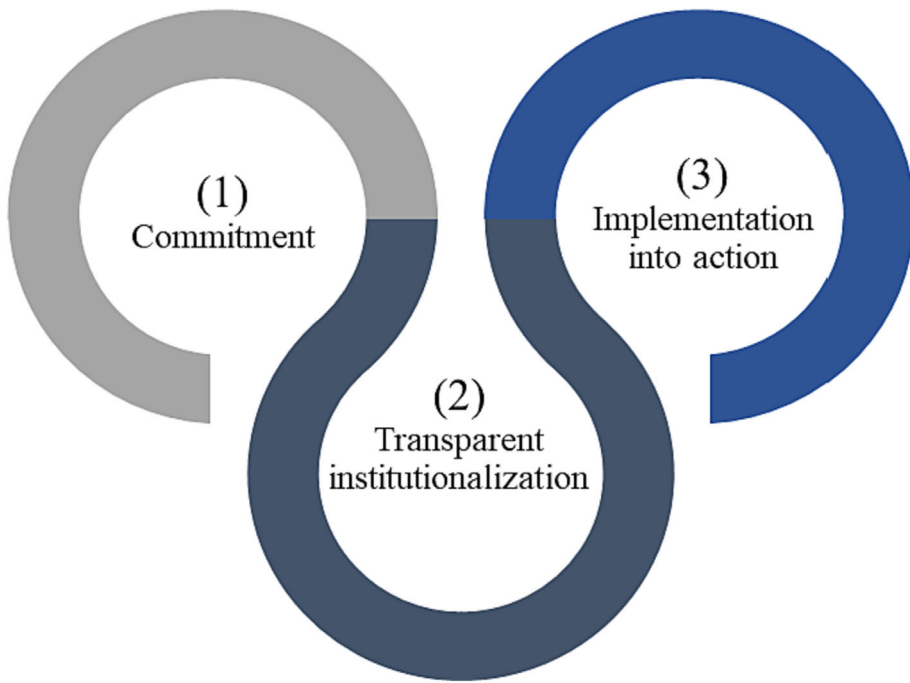
FIGURE 1 The organizational integrity triad with its three manifestation degrees.

Regarding the first question, we argue that a commitment publicly expresses and records a corporate position or self-legislated norm on a certain topic that is in the interest of the company's stakeholders and on which no positioning is obligatory from a legal point of view (e.g., a company in the cosmetics industry expresses its opposition to animal testing and publishes its position on the corporate website). Furthermore, ideally, a commitment is demanding rather than lapidary (McFall, 1987).

As for the second question of when a commitment counts as transparently institutionalized, we argue that the institutionalization refers to the implementation of the position or self-legislated norm into corporate internal decision structures (e.g., in the form of policies or guidelines). Furthermore, transparent, in this context, refers to reasonable and requires qualitative or quantitative reporting on the committed conduct. The Global Reporting Initiative (GRI) Standard,[9] for example, provides global best practices for impact reporting on the economy, environment, and people.

To the third question, whether all commitments must be transparently institutionalized to be valid, we respond by saying no. Besides the explicit form of organizational integrity, there is an implicit form. As the definition above indicates, there are fundamental moral principles inherent in the organizational integrity construct, without which organizational integrity can hardly unfold. These moral principles include, for example, legal compliance. It does not require active commitment to comply with the law, meaning legal compliance is implicitly inherent in the construct. Merely the explicit form of organizational integrity requires a transparent institutionalization of the commitment. Besides a profound definition, we demand the theoretical model of the organizational integrity construct be based on solid theoretical grounds. In the following, we introduce three theories that, we suggest, build the groundwork for construct conceptualization.

3.2 | Three theories that build the groundwork for conceptualizing organizational integrity

3.2.1 | Theory of incomplete contracts

The theory of incomplete contracts (Grossman & Hart, 1986; Hart, 1995; Hart & Moore, 1990) posits that interactions are not completely determined by rules and contracts (Hart & Holmstrom, 2010). Consequently, a certain level of predictability is required among the actors involved. While institutional arrangements are intended to allocate power among agents, morality reduces the cost of searching, negotiating, and implementing agreements (Hart, 1995). Morality is an important precondition for economic health and growth. In this sense, organizational integrity—particularly the explicit form that comes with commitments and their transparent institutionalization—helps increase the predictability of the involved actors and can compensate for incomplete contracts (Luetge et al., 2016).

3.2.2 | Stakeholder theory

The stakeholder theory (Freeman, 1984) suggests that managers have a duty to formulate and implement processes, which align and satisfy all stakeholders' needs and ensure the long-term success of a company. Furthermore, stakeholder theory provides the opportunity to redefine the way of thinking about value creation and trade (Freeman, 2010). "If we can make the twenty-first century the century of value creation for stakeholders [...], then the sheer audacity of our fellow humans will lead to prosperity and freedom for more and more people" (Freeman, 2010, p. 9). Besides, "firms that contract (through their managers) with their stakeholders on the basis of mutual trust and cooperation will have a competitive advantage over firms that do not" (Jones, 1995, p. 422). As organizational integrity functions as a binding element between the company and its stakeholders (and among the stakeholders themselves) and a lack of organizational integrity is likely to have consequences for several stakeholders of a company, we suggest considering a stakeholder approach in terms of scope and structure in the theoretical model of the organizational integrity construct.

3.2.3 | Pyramid of corporate social responsibility (CSR)

The pyramid of corporate social responsibility (CSR; Carroll, 1991) suggests that a company must fulfill responsibility at four levels: economic, legal, ethical, and philanthropic. All four levels build on each other. The lowest level, thus the foundation on which everything stands, is economic responsibility. "[B]usiness organizations were created as economic entities designed to provide goods and services to societal members" (Carroll, 1991, p. 40). They may and should make acceptable profit because without a sustainable and profitable business model, all other three responsibilities become impossible to fulfill. The second level is legal responsibility. Within the framework of the social contract between business and society, companies are expected to operate legally. They are expected to comply with laws and regulations enacted by federal, state, and local governments as basic rules for doing business. Although economic and legal responsibilities involve ethical norms about fairness and justice, they cannot codify all activities and actions in law. The third level is

ethical responsibility, which goes beyond the law and embodies those standards and norms that protect the moral rights of stakeholders. Furthermore, "ethical responsibilities may be seen as embracing newly emerging values and norms society expects business to meet, even though such values and norms may reflect a higher standard of performance than that currently required by law" (Carroll, 1991, p. 41). For the theoretical model of the organizational integrity construct, we propose it to be forward-looking and develop over time. At the top of the CSR pyramid is philanthropic responsibility. This stage is about embracing corporate citizenship and contributing resources to communities, thus improving the quality of life in the community. Considering that corporate social responsibility is only one out of several corporate responsibilities, Maak (2008) argued for a broader and more inclusive notion in place of CSR, namely, that of organizational integrity.

In summary, organizational integrity manifests in corporate behavior and actions. These behaviors and actions group into three (closed) stages, the organizational integrity triad. The organizational integrity triad represents a central element in our theoretical model. Additionally, we have introduced three theories from which we derive three implications for the theoretical model's scope and structure. First, the theoretical model ought to help improve the predictability of the actors involved and compensate for incomplete contracts. Consequently, transparency plays a key role. Second, the theoretical model design should consider all stakeholder relationships of the company in a balanced way. Third, the theoretical model ought to take into account all four levels of the corporate social responsibility (CSR) pyramid, but it should also go beyond these.

4 | DEVELOPING A THEORETICAL MODEL OF THE ORGANIZATIONAL INTEGRITY CONSTRUCT

Based on the theoretical foundation, we answer our first guiding question of what a theoretical model of organizational integrity can look like. We propose a theoretical model of the organizational integrity construct that takes a holistic approach and derive three types of dimensions that form the model's structure: prerequisite, dependent, and independent. Table 1 shows these different types and their associated dimensions. In total, we suggest 16 dimensions for the theoretical model.

TABLE 1 Sixteen dimensions of the theoretical model of organizational integrity, categorized into three types of dimensions.

Prerequisite dimension	Independent dimensions	Dependent dimensions
1. Legal compliance	1. Communications	1. Competitors
	2. Corporate culture and climate	2. Customers and clients
	3. Corporate policies	3. Employees
	4. Human resources instruments	4. Politics
	5. Incentive and reward structures	5. Shareholders
	6. Reporting and decision structures	6. Society
	7. Resources	7. Suppliers and business providers
	8. Whistleblower system	

Note: Dimensions are listed alphabetically not by relevance.

The prerequisite dimension refers to the implicit form of organizational integrity. It builds the basis without which it is hard for a company to act with integrity. The independent dimensions enable organizational integrity. They form the infrastructure for (corporate) actions. Finally, the dependent dimensions refer to the behavioral part of organizational integrity. They characterize corporate behavior and, more precisely, the company's interaction with its different stakeholders. Each of the 16 dimensions assist to identify the company's most important (direct and indirect) integrity-relevant touchpoints.

4.1 | The prerequisite dimension

As elaborated above, the implicit form of organizational integrity does not require an active commitment—and this is the case with legal compliance. Based on the CSR pyramid (Carroll, 1991), compliance with legal norms is the company's most important responsibility. It forms a mandatory part of organizational integrity as it is the minimum requirement when conducting business. Legal compliance is a company's core obligation (see, e.g., Cosans, 2009) and includes civil and criminal law standards in the company's home country and abroad where it is doing business.

4.2 | The independent dimensions

The independent dimensions represent corporate properties and artifacts. They enable not only economic responsibility (Carroll, 1991) but also organizational integrity. We suppose that long-term, organizational integrity requires a corporate infrastructure that defines corporate internal decision structures, has appropriate incentive and management systems in place, and among others, includes a healthy corporate culture and climate (see, e.g., French, 1998; Hajduk & Schank, 2017). Corporate culture and ethical climate are, according to Kaptein and Avelino (2005, p. 46), the "breeding ground for unethical conduct." Furthermore, corporate values and standards need to be communicated effectively through different channels within the company to create and sustain organizational integrity. Clear communication plays a key role here. Expected behavior—at a corporate and individual level—ought to be comprehensive in language and should reach and address management and employees in a specific manner based on the target group. However, misconduct is ubiquitous and part of human nature. Therefore, companies (because ultimately this is where humans are involved) should control and mitigate unethical behavior by putting systems in place to detect and prevent misconduct, for example, a whistleblower system. Organizations that encourage whistleblowers can quickly uncover and respond to internal misconduct, which, in turn, promotes organizational integrity (Luetge & Uhl, 2021).[10] In total, we propose eight independent dimensions that build the corporate infrastructure ground of the theoretical model (see also Table 1): communications, corporate culture and climate, corporate policies, human resources instruments, incentive and reward structures, reporting and decision structures, resources, and a whistleblower system.

4.3 | The dependent dimensions

Organizational integrity is visible in and through corporate actions (see also Fuerst & Luetge, 2021). Consequently, in a narrow sense, merely dependent dimensions constitute organizational integrity as it manifests in behavior. Following the stakeholder theory (Freeman, 1984, 2010), our theoretical model's dependent dimensions are equivalent to the company's stakeholders. By considering its responsibilities toward stakeholders, a company can succeed in bringing back together business and society and creating shared value (Porter & Kramer, 2006, 2011). Table 2 shows the seven dependent dimensions with their supposed sub-dimensions. The topics (subdimensions) derive from the different corporate responsibilities toward different stakeholder groups. It shows a first overview of topics. We suggest that each company creates its own stakeholder map to best consider their individual relationships.

Each subdimension is based on the organizational integrity triad (see Figure 1). This means that regardless of the topic (subdimension), it is always about (1) the active commitment and positioning on the topic, (2) the transparent institutionalization of the commitment(s) into corporate internal processes and structures, and (3) the assurance of commitment implementation into action(s). The exemplary subdimension *6.4 Environment protection* demonstrates this

1. Manifestation of commitment: Adherence to the United Nations Sustainable Development Goals[11] and other international treaties relating to environmental protection is a clear sign of joining efforts to protect the environment. A proactive commitment to sustainability and environmental protection as a corporate goal could be made, for example, in the company's annual or sustainability report.
2. Manifestation of transparent institutionalization: The transparent institutionalization can, for example, find its form in corporate policies, internal guidelines, and processes. The eighth principle of the United Nations Global Compact[12] states that companies should take initiatives to promote greater environmental responsibility. The existence of internal guidelines and processes is an important tool for assessing a company's readiness and efforts to avoid violations of environmental legislation and is a prerequisite for a standardized approach to environmental issues. However, as we advocate transparent institutionalization, reporting according to the Global Reporting Initiative (GRI)[13] guidelines No. 301–308, which relate to the topic of environmental protection, can fulfill this part of the organizational integrity triad.
3. Manifestation of implementation: Finally, implementation or, more precisely, compliance with the company's commitment is examined. Structural cases of noncompliance with environmental legislation as well as self-imposed guidelines can, thus, be analyzed.

4.4 | Two principles for acceptance and added value of future organizational integrity measurement based on the proposed theoretical model

Besides the need to empirically substantiate the proposed theoretical model (e.g., verifying the dimensionality of the approach), we see two principles for acceptance and added value of future organizational integrity measurement: first, data and method triangulation and, second, state-of-the-art level.

TABLE 2 The seven dependent dimensions and their subdimensions.

1. Competitors	2. Customers and clients	3. Employees	4. Politics	5. Shareholders	6. Society	7. Suppliers and business partners
1.1 Market behavior	2.1 Artificial intelligence	3.1 Collective bargaining	4.1 Political engagement	5.1 Shareholder relations	6.1 Animal protection	7.1 Partner relations
	2.2 Customer protection	3.2 Diversity and inclusion			6.2 Child labor	7.2 Supply chain management
	2.3 Data privacy				6.3 Corruption and money laundering	
	2.4 Product/service safety				6.4 Environment protection	
	2.5 Product/service development				6.5 Human rights	

Note: Subdimensions are listed alphabetically not by relevance.

4.4.1 | Data and method triangulation

"[T]riangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches" (Patton, 2001, p. 247). As the dependent dimensions suggest, measuring the three triad levels requires different types of data, which, in turn, require different methods of data collection. Content analyses as well as qualitative (expert) interviews could be plausible here. In addition, the prerequisite and independent dimensions also ask for tailored data collection methods. To give examples, corporate culture is likely to be assessed via a survey; corporate communications and corporate policies are likely to be assessed via content analysis.

4.4.2 | State-of-the-art level

Developing a theoretical model as a basis for the organizational integrity measurement is not a one-time effort as new societal values and norms emerge, new socio-economic trends progress, and environmental demands reveal new normative questions that go hand in hand with ethical responsibility according to the CSR pyramid. Consequently, new fields and topics will emerge over time that require clear and transparent commitments from companies. A recent example is the topic of artificial intelligence (AI). As AI has become ubiquitous in a business context, its management requires an approach that also considers and prevents potential negative side effects for different stakeholders (e.g., consumers and employees). The OECD Principles on Artificial Intelligence[14] was one of the first frameworks on AI. However, these initially developed general principles have quickly become unsatisfactory; in fact, they had to become more specific—sector-specific. A multistakeholder forum called AI4People[15] launched at the European Parliament to bring together actors to shape the social impact of new applications of AI. Actors include the European Parliament, civil society organizations, industry, and media. Additionally, a high-level expert group on AI was established. In 2020, seven sector-specific AI4People committees—consisting of Automotive, Banking and Finance, Energy, Healthcare, Insurance, Legal Services Industry, and Media and Technology—led to AI4People's Seven AI Global Frameworks.[16] These frameworks could form the basis for the topic of AI within the respective dimension(s) of the theoretical model. In summary, AI is a good example of how quickly a field can evolve, and rapid further development seems certain. Maintaining state-of-the-art relevance will be crucial to the acceptance and value of any future organizational integrity measurement.

5 | FUNDAMENTAL CONSIDERATIONS ABOUT MEASUREMENT

Above, we outlined a first theoretical model as the basis for organizational integrity measurement by conceptualizing the construct and sizing the theoretical model's scope. However, concerns to the ethicality of measurement in social and human science exist (see, e.g., Boje et al., 2006; Mau, 2019; Power, 1997, 2010). For this reason, in our final section, we answer our second guiding question if organizational integrity can be measured (at all) and aim to critically evaluate the measurement as such and show how and why measurement can be an asset.

5.1 | Can we measure ethical concepts at all?

In the last decades, the pace and scope of measurement as a critical feature of modern societies have significantly expanded (see, e.g., Kroeger & Weber, 2014; Mennicken & Espeland, 2019; Zyphur & Pierides, 2017); Mau (2019) even called it the *metric society*. Yet, how about the measurement of ethical concepts, like organizational integrity? Distinguishing actions as morally valuable or ethically correct depends on the ethical justification of norms. Hence, it depends on the observer's moral framework, the ethical norm assessment, and the action's circumstances. There are three[17] main theories of the ethical justification of norms: deontological ethics, utilitarianism, and virtue ethics. According to deontological ethics, acting morally correct means acting out of duty. According to utilitarianism, acting morally correct means acting with the best possible utility. And finally, according to virtue ethics, acting morally correct means acting virtuously. Thus, existing pluralism of values, norms, and principles makes it difficult to establish consensus on moral and socioeconomic issues (Luetge & Uhl, 2021). However, "the goal of ethics has always been to conclusively and convincingly answer the questions of the just social order and to generate binding norms of actions in order to finally resolve moral problems" (Luetge & Uhl, 2021, p. 81). Tools exist to establish norms as a society in the context of moral dissent. Examples range from social contract theory and the democratic process to discourse theory (Luetge & Uhl, 2021).[18]

5.2 | Two sets of ethical stakes in terms of measurement and quantification

According to Islam (2021), ethical stakes in scientific measurement and quantification discussions across diverse research areas (e.g., sociology, anthropology, accounting, public administration, and data studies) are characterized by two wide-ranging sets of concerns.[19] The first set refers to an epistemic nature, more precisely, "numbers and their relation to social reality, representation, and the consequences of articulating complex qualitative experience as quantitative data" (Islam, 2021, p. 2). Thus, in focus is the interplay between the representativity and the performativity of numbers. The first signifies the power to illustrate and render social phenomena tangible. The latter embodies the power to form and constitute social phenomena (Desrosières, 2016; Islam, 2021; Mennicken & Espeland, 2019). The second set of concern refers to the issue of social control. Accordingly, measurement and quantification are linked through a social control mechanism by government and corporate actors (Islam, 2021). Both are being empowered by numbers and (big) data, which lead to control and surveillance instruments on the government side and to capitalization and diverse advantages (e.g., increased economic value) on the market side (see, e.g., Beverungen et al., 2015; Power, 1997, 2004).[20]

5.3 | Toward a sensitive and modest use of measurement and quantification

However, we argue for a higher awareness of the power of measurement and quantification for social reality, for their careful weighing of the risks and benefits, and to not demonize measurement and quantification per se. At the same time, this also means that it is the

responsibility of an ethics of quantification to build a framework and agenda around each set of concerns—today and tomorrow. Research like that of Islam (2021), who designed a working model of ethical considerations around quantification, becomes more important and relevant than ever. We share his view and "do not argue for the rejection of [measurement and] quantification as such but rather for its modest use within a pluralistic epistemic toolbox that is tailored to the requirements of specific action situations" (Islam, 2021, p. 2). By managing to control and actively minimize risks, the benefits of measurement and quantification enrich development in various areas because "these operations confer commensurability onto the variety of social experience, making life manageable in ways that support the functioning of organizations, markets, and governments" (Islam, 2021, p. 15).

Therefore, our proposed theoretical model as the basis for organizational integrity measurement focuses on inhibiting and facilitating factors rather than on judging certain subjects. Additionally, with regard to a future organizational integrity measurement instrument, we argue for sensitive data sourcing. The key question regarding data sourcing should be as follows: How can existing data be processed in the best possible way while collecting as little new data as possible? The use of preexisting data may include content analysis of, for example, a sustainability report, an annual report, or diverse databases.

6 | CONCLUSIONS AND IMPLICATIONS

With this work, we have sought to create beginnings rather than endings and groundwork rather than scale development. With our theoretical model, we have prepared the ground and modeled the first scope and content of an organizational integrity measurement instrument based on a solid theoretical foundation. Further, we have outlined two principles for acceptance and added value and have entered the conversation as to when measurement of ethical concepts should be legitimate. By applying a new paradigm using a holistic approach, the first steps of future research directions have been taken.

6.1 | Practical implications

We see strong practical implications in this research. The proposed theoretical model can build a sound basis for a future organizational integrity measurement instrument. Organizational integrity measurement, in turn, enables identifying potential corporate risks by knowing and examining integrity-relevant touch points that a merely compliance-based corporate governance model might not be able to detect. It will help practitioners and corporate governance experts reduce the complexity of information and will make the construct comparable over time and, thus, progress (or regress) visible. At the end of the day, the intention is not so much a control instrument but rather a working tool that helps companies fulfill their corporate responsibilities. Therefore, it renders the path to corporate citizenship tangible and, thus, manageable and can help prevent scandals that threaten the existence of companies, such as the subprime mortgage crisis that caused Lehman Brothers to apply for insolvency or the Diesel emission scandal that severely disrupted the Volkswagen Group.[21]

6.2 | Implications for future research

The proposed theoretical model would benefit from both further theoretical and empirical research. At the theoretical level, the dimensions could be challenged, expanded, and specified. In addition, it could be explored which existing standards (e.g., GRI, United Nations Sustainable Development Goals, Bribery Act, and Ethics & Compliance Initiative or ECI) could be used to operationalize and assess the organizational integrity triad dimensions (dependent dimensions). At the empirical level, future research can substantiate the theoretical model by validating its dimensionality. When it comes to the development of a measurement instrument, determining which method best suits the different types of information and data would be important. Finally, exploring statistical correlations between the dimensions and its topics would be interesting. Actual scale development and, if appropriate, testing for reliability and validity[22] also remain open for future research.

CONFLICT OF INTEREST STATEMENT
The authors declare that they have no conflict of interest.

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ENDNOTES

[1] Certain groups of individuals can be viewed as single agents. They possess the ability of agency which is generally attributed to physical persons only. For a more detailed elaboration, see List and Pettit (2011).

[2] Rossouw (2008) even found (organizational) integrity to be the construct through which business ethics—as one form of applied ethics—can be practiced.

[3] Solomon (1992b) even referred to integrity as a supervirtue.

[4] Few research projects focus on the team-level unit of analysis, for example, Palanski et al. (2011). However, we do not go into more detail as the literature review is intended to give a general overview.

[5] Most studies use virtuousness and virtues interchangeably. For a precise distinction of the two concepts, see Sison and Ferrero (2015).

[6] For the 31 items, see Craig and Gustafson (1998, p. 143f).

[7] In a nonmetaphorical manner. In this context, see, for example, French (1998) and List and Pettit (2011).

[8] We propose that the *integrity triad* term is also valid in the context of personal integrity. However, certain factors, such as transparent institutionalization, will manifest themselves differently.

[9] https://www.globalreporting.org/

[10] In 2002, the Sarbanes–Oxley Act introduced the concept of whistleblowing for private companies in the United States. The US federal law was a reaction to corporate reporting scandals, such as Enron and WorldCom. Since then, all publicly traded companies (in the United States) have been required to establish a whistleblowing function. In December 2019, a European Commission regulation on the protection of whistleblowers went into effect.

[11] https://www.undp.org/content/dam/undp/library/corporate/brochure/SDGs_Booklet_Web_En.pdf

[12] https://www.globalcompact.de/fileadmin/user_upload/Dokumente_PDFs/2021_New_VP_Brochure_20211012_FINAL.pdf

[13] https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/

[14] https://www.oecd-ilibrary.org/science-and-technology/artificial-intelligence-in-society_eedfee77-en

[15] https://www.eismd.eu/ai4people/

[16] https://ai4people.eu/wp-content/pdf/AI4People7AIGlobalFrameworks.pdf

[17] In large parts of the literature, only two main ethical theories are referred to deontological ethics and utilitarianism. Adherents of these two theories claim that "their views already incorporate many of the theses allegedly peculiar to virtue ethics" (Crisp, 2005, p. 1043). Yet, virtue ethics has experienced a renaissance in recent decades and is increasingly used as a philosophical foundation for addressing business phenomena (e.g., Koehn, 1995; Moore, 2015; Robson, 2015; Solomon, 1992a). Therefore, we refer to three main theories.

[18] For a structured presentation of the three central conceptions of justification of norms under dissent, see Luetge and Uhl (2021, p. 88ff).

[19] Mennicken and Espeland (2019) showed four domains where measurement and quantification scholarship has particularly flourished: administration, democratic rule, economics, and personal life.

[20] For a more detailed summary of the two sets of ethical stakes, see Islam (2021).

[21] In 2019 and 2021, a pilot measurement instrument based on our proposed theoretical model has been developed and explored in a practical pilot case and recurring assessment at one of the world's largest automotive manufacturers, which also experienced challenging times after the Diesel emission scandal in 2015.

[22] We are aware of the controversial debate about validity and reliability in multimethod approaches, especially in qualitative research. For a good summary, see, for example, Golafshani (2003).

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