Whistleblowing and interpretation, addressing organizational challenges: a conceptual reflection from Nigeria

Daniel E. Ufua, Fawwad M. Butt and Mamdouh Abdulaziz Saleh Al-Faryan

Abstract

Purpose – *This study aims to explore the effect of whistleblowing and interpretation among practitioners in the Nigerian economy. The research puts a premium on understanding the relevance and critical issues in its practices and developing an improved model for the effective practice of whistleblowing and interpretation in Nigeria.*

Design/methodology/approach – *This study adopted a conceptual approach, relying on extant literature to understand the management of whistleblowing incidents and identify the managers' and other stakeholders' responsibility in the whistleblowing process. It applied systems dynamics conceptual modelling and presented an improvement approach to addressing the complexities associated with whistleblowing and interpretation among Nigerian organizations.*

Findings – *This study contributed to the extant literature by developing a model for proper management of whistleblowing in the Nigerian context and enhancing the robust practice of whistleblowing and interpretation in Nigeria. The findings highlighted critical factors such as managers' skills development, legal system support, institutional stakeholders' function and ethical balance as key factors to effective whistleblowing management and interpretation. This implies that the act of identifying and developing responses to an emerging case of whistleblowing requires a process of developing underpinning assumptions, engagement and consideration of stakeholders' interests while driving the sustenance of organizational focus.*

Originality/value – *This study emphasized the departure from absolute best practice to developing idea approaches that reflect stakeholders' interests and the context of whistleblowing and interpretation. While the study acknowledges limitations in the sole focus on the Nigerian private sector and the Nigerian economic background, it recommends further exploration of whistleblowing and its interpretation on a comparative approach, to improving the current understanding of the topic.*

Keywords *Manager's responsibility, Nigerian economy, Whistleblowing*

Paper type *Research paper*

Daniel E. Ufua is based at the Centre for Economic Policy and Development Research (CEP DeR), Department of Business Management, College of Management and Social Sciences, Covenant University, Ota, Nigeria, B.E. & I Cluster, Covenant University Ota, Ota, Nigeria and Research Associate, DePECOS Institutions and Development Research Centre (DIaDeRC), Ota, Nigeria. Fawwad M. Butt is based at the Department of Business Administration, ILMA University, Karachi, Pakistan. Mamdouh Abdulaziz Saleh Al-Faryan is Board Member and Head of the Scientific Committee, at The Saudi Economic Association, Riyadh, Saudi Arabia.

Introduction

Whistleblowing has become a key source of information, having a fundamental influence on an organization's operations and the interest in addressing complex operational issues. It usually covers the relationship with partners and stakeholders in their operational process (Onyango, 2021). Whistleblowing in the Nigerian context is similar to the rest of the world, done with several interests, such as reporting an incidence of wrongdoing to find attention and justice. The essence of whistleblowing is broadly to allow an individual in a workplace to speak out when he senses an abnormality in the work process at a particular time. However, it also comes with the elements of rebuke by the affected individuals, especially if they are of superior ranking positions in the organization. These may result in victimization, abuse or broad retaliation (Wilkes *et al.*, 2011; Jack *et al.*, 2021).

FORESIGHT

Some researchers view whistleblowing as an unethical act committed by anyone who has salient or confidential information about an organization's operations: others see whistleblowing as a heroic act meant to defend and portray environmental values that provide a critical examination of an organizational norm (Bouville, 2008; Berendt and Schiffner, 2021). Although extant rules and regulations of engagement apply to organizational operations, researchers note that whistleblowing provides a medium to identify and address certain organizational irregularities such as fraud and neglect, and create the prompting for effective actions that can reposition the operations on the path of set goals and objectives (Maroun and Atkins, 2014; Dauda, 2017).

Available information from the extant literature reckon critical issues such as fear and breach of whistleblowers' confidentiality, resulting in outright retribution, ostracism and defamatory treatment of whistleblowers (Bamgbose, 2017; Asekhauno, 2022; Esavwede et al., 2023). These constitute a conspicuous gap that informs the aim of this study, which is to develop learning about the concept and application of whistleblowing in the Nigerian context.

While organizations focus on the pursuit of their set operational objectives, they tend not to be able to control the possibility of emerging issues such as whistleblowing and interpretation, that can affect both their operational drives and the responses of the affected stakeholders in the business environment, especially in developing economic backgrounds such as Nigeria (Sam-Eleyi and Peace, 2023). As a result, this study aims to explore the impacts of whistleblowing and interpretation in Nigeria. The study examines the factors that affect decisions and actions regarding whistleblowing and interpretation in Nigeria. It is expected to facilitate the productive use of whistleblowing and interpretation to support these businesses in their drive for effective operational practices.

The critical questions raised in this study are:

Q1. How do managers perceive and interpret whistleblowing information?

Q2. What factors can inform or influence their mode of interpretation of whistleblowing in Nigeria?

Q3. How can effective ethical balance be incorporated into whistleblowing in Nigeria to project valuable learning and improvement with minimal harm to the whistleblower and other parties involved?

The Nigerian economy has businesses that bear almost all their risks and challenges independently, with minimal support from the public sector (Ufua et al., 2020a, 2020b, 2020c). The practice of using whistleblowing as a tool to expose and address operational aberrations, coupled with the interpretation of whistleblowing is anchored on the interest and attention of the concerned stakeholders such as the managers, affected group of stakeholders and the prospective focus of the organization involved (Premium Times Newspaper Report, 2022).

As a result, this study is focused on how Nigerian organizations can develop a trend that can sustain progress and satisfaction from whistleblowing and interpretation, in their drive to address operational complexities while aiming to achieve set goals and objectives. The study aims to suggest a model to explore the act of whistleblowing and interpretation among organizations in Nigeria. It also pays due attention to the effects of whistleblowing and interpretation and how these can be harnessed to improve the operational processes and achieve sustainable moral values embedded in their operations (Orlu et al., 2021; Parhizkar et al., 2021).

The unique contribution of this study stems from its emphasis on the departure from the best practices in the management of whistleblowing and interpretation approaches, which embraces the concept of universality, to ideal practices that consider the stakeholders'

interest and the context that allows the spatial interpretation that reflects the interest of the affected stakeholders (see Tomo *et al.*, 2020; Florin, 2022).

Towards understanding whistleblowing interpretation in business management practice

Whistleblowing is reporting inappropriate behaviour committed by an individual group or organization(s) or suspected wrongdoing or risk of wrongdoing to an authority. Whistleblowers tend to act at significant risk that could bring personal cost to themselves when exposing injustice. Those responsible for whistleblowing are called whistleblowers (Smaili, 2023). Igboji (2018) viewed whistleblowing and interpretation as a means to keep organizational rules of engagement and ethical practices and as a channel to report contradictory incidences that portray compromise or deviations from set operational standards.

Observers note that whistleblowing may disrupt the functioning of an organization. Practicing managers are responsible for interpreting the content of whistleblowing and reacting in suitable ways to address emerging issues (The Athletic Report, 2020; Weick, 2021). This suggests that the interpretation of whistleblowing requires critical factors that can enhance proper interpretations, or sometimes non-response to an act of whistleblowing can be interpreted as either unethical or immoral on the part of the practicing organization in addressing complexities in an operational process (Olonade *et al.*, 2021; Asekhauno, 2022). Nevertheless, some observers posit that sometimes a potential whistleblower can maintain a "fallacious silence" refusing to participate in the act of whistleblowing, being under the influence of factors such as rationalization, perceived opportunity or gratification or other economic benefits (MacGregor and Stuebs, 2014).

Similarly, many factors related to one's organization (e.g. whether an organization explicitly supports whistleblowing, educates its employees about channels for reporting unethical behaviour and protects the identity of whistleblowers) and situation (e.g. having sufficient proof of wrongdoing, fear of retaliation) have consistently been shown to influence willingness to blow the whistle (Near and Miceli, 2008; Cassematis and Wortley, 2013). This points to the extant risks that can be involved with whistleblowing and interpretation. It also highlights the ethical challenges, such as the unjustifiable intention of the whistleblower, especially in contexts such as Nigeria, where the legal system seems slow in providing the needed backing for business activities (Nwosu, 2023; Ogbe and Oyibokure, 2023). It, therefore, raises the issue of how much protection a whistleblower can have? These point to the need for freedom for the whistleblower and the need for adequate ethical balance that can offer the justification and value development for improvement from the incidence of whistleblowing (Zhou *et al.*, 2018; Ugwuozor and Onwurah, 2022).

Management practitioners view whistleblowing and interpretation from diverse perspectives, leading to actions and decisions shaping organizational members' commitment to attaining competitive advantage. For instance, resource-based organizations tend to apply whistleblowing and interpretation as relevant tools for building fairness and equality required for sustainable competitive advantage that can support the commitment of members across the organizational structure (Gueler and Schneider, 2021; Ullah *et al.*, 2023). These are relevant for the optimum use of acquired resources and promote accountability, through a process of evaluation that can herald continuous improvement (Ayres *et al.*, 2022). This is done through a reliable system of reporting and balances that includes whistleblowing and interpretation (Beardwell and Claydon, 2007; Cooper *et al.*, 2023).

Based on this narrative, it seems clear that whistleblowing and interpretation are evaluative practices that tend to continuously draw the attention of practicing managers in today's organizations, especially in developing countries such as Nigeria, focused on in this study.

Whistleblowing and interpretation, can, therefore, redirect the practicing managers and members of an organization to harness their potential for creativity and innovation, to make suitable decisions and actions needed to manage their business environments alongside their operational objectives (Ibidunni *et al.*, 2022). The next section provides details about the underpinning theory adopted in this study.

Underpinning theory

This study adopts systems theory to explore whistleblowing and interpretation in the context of the extant complexity of the Nigerian business environment. The study uses a systems dynamics conceptual model to present the suggested model in Figure 1. It offers the connectivity of the factors indicated in this study for improvement, of the current whistleblowing practices and interpretation (Forrester, 2007; Shepherd, 2014). Studies have adopted other theories, such as the resource-based view, which focuses on examining the capability of firms sourcing resources to build competitive advantage in a complex market (Andersen, 2021).

The adoption of systems theory is meant to enhance a process of inquiry into the connectivity and structural functioning within the Nigerian economy (Checkland, 1981; Midgley and Lindhult, 2021). The system approach provides a clearer view of the actions and connectivity of motives between the whistleblower and the interpreter for an effective management decision process and the preservation of the confidentiality of the individual interests involved. Systems approach provides a fair platform for due consideration of the end-to-end effects of decisions and actions, within the whole process of whistleblowing and interpretation, to ensure fairness and justification (Pamungkas *et al.*, 2020; Achyarsyah, 2022).

In this study, systems view, as demonstrated in the use of systems dynamics conceptual approach adopted to present the suggested model in Figure 1, can create awareness among stakeholders in the process, and facilitate a clear basis to appropriate the management of whistleblowing and interpretation while giving due attention to the avoidance of unwanted effects such as the marginalization of certain parties in the process through an error of judgement, that can lead to inequality and unfairness (Luhmann *et al.*, 2013; Lindhult *et al.*, 2022; Naumann *et al.*, 2022). This again, presents the practicing

Figure 1 Proposed model for effective management of whistleblowing and interpretation

Source: Authors' own compilation
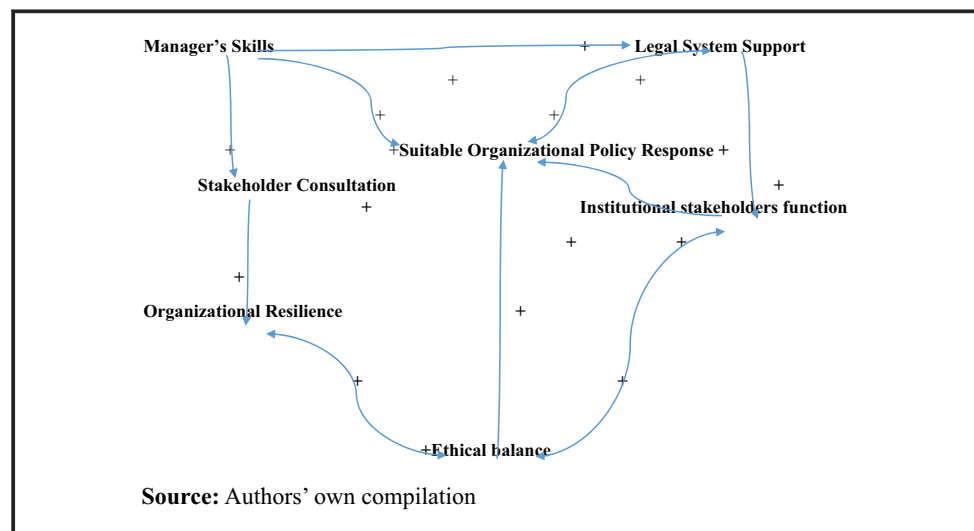
manager and practitioner with the responsibility to ensure proper management of whistleblowing procedures and to ensure fair organizational practice relating to the subject (Ufua *et al.*, 2020a, 2020b, 2020c). This study argues that systems theory has the potential to position managers and practitioners with the requisite knowledge to project a future that enhances operational cohesion and considers the interests of the affected stakeholders. The next section provides details of the methodology adopted in this study.

Methodology

This study adopts a conceptual review, relying on the trend of the extant literature on whistleblowing, interpretation and their inherent effects on organizational operations. While Miceli and Near (2005) identified the challenges of developing suitable methodological approaches for providing solutions for whistleblowing and interpretation, the current research puts a premium on the findings from various studies from diverse backgrounds to develop an approach to suitable management of the incidence of whistleblowing in the Nigerian context; conceptual approach, therefore, can enhance understanding of the key concepts focused in this study and propose an approach for improvement based on findings from the extant literature (Ismael *et al.*, 2020).

The adoption of systems dynamics conceptual model is focused on developing an ideal approach to identify gaps in whistleblowing processes and interpretations, with the broad aim of developing theoretical contributions that refine thoughts on the research topic of interest (Hulland, 2020). This study also aims to create a suggested model for effective management of whistleblowing and interpretation among managers and practitioners in the Nigerian business environment. This will facilitate an extensive discussion on the suggested model to create future directions for more practice of these concepts among practitioners in Nigeria (White *et al.*, 2019; Cosenz and Bivona, 2021).

According to Brunton *et al.* (2021), the application of the systems dynamics model is suitable for modelling non-linear functions for easy understanding to participants, relevant to discerning operational directions and control that reflect the realities in an active process.

In this study, the selection of the extant literature is based on their relevance in representing current issues and the practice of whistleblowing and interpretation. This was to facilitate a formidable understanding of the current trend of debate and practices of whistleblowing and interpretation, as well as create a precedence to develop a suggested model for improvement on the concept and practice of whistleblowing and interpretation in the Nigerian economy (Smith and Shaw, 2019).

Literature were sourced from various online search engines, including Scopus and Science Direct. Others are from relevant academic journal websites such as Wiley, Emerald and Springer Nature. Authors also considered materials from sources such as newspaper reports, websites, authors' universities and personal libraries. This is adopted because they also project the relevance and the contribution of their thoughts to the argument projected in this study (Krtalić and Dinneen, 2022; Lund *et al.*, 2023).

The selected literature were sieved, based on their indexing to ensure the authenticity of the argument and contributions to the development of whistleblowing and interpretation, focused in this study (Jiang *et al.*, 2020). The authors also ensured that all consulted literature were duly published either in print or retrievable online forms. Literature that were not already published or not in the process of publication were deliberately excluded from selection to enhance the authenticity of the discussion in this study. For ethical reasons, all cited materials were duly referenced (Uddin *et al.*, 2020; Ufua *et al.*, 2021a, 2021b). The summary of the key criteria for the selection and exclusion of the extant literature is presented in Table 1.

Table 1	Criteria for selection of literature	
Selection criteria	Exclusion criteria	No. of literature considered
Selected literature must align with the adopted keywords in this study	Any literature outside the focus of the study was not selected	30
Selected literature must be published	Unpublished literature materials were not selected	54
The abstract and content must align with the focus of the current study	Any literature not relevant to this study was not selected	44
The materials must be significantly recent	Extant literature that were too old were excluded to maintain the recency of the argument presented in the study	52
The background location base focused in the selected literature were mainly from Nigeria, Africa or the developing world	Except for comparative argument, the study excluded literature from the developed world backgrounds	22
Source: Authors' compilation		

Proposed model for effective management of whistleblowing and interpretation

The information presented in Table 1 represents the selection and consideration of literature used in the development of the factors presented in the suggested model and the subsequent sections of this study. This covers extensive factors responsible for suitable interpretation and response to emerging whistleblowing information, as well as timely actions to address the challenges of whistleblowing incidences adequately (Figure 1). These factors and their relationships are captured in Figure 1. Based on system theory, the factors captured in Figure 1 are interrelated in their functionality in the light of whistleblowing and interpretation. The reinforcement in the relationship between the factors presented in the model (represented with + sign), indicates the relevance and their joint contribution towards effective whistleblowing management. These factors are discussed in subsequent sections based on findings from extant literature.

The systems dynamic conceptual model presented in Figure 1 was developed to capture the relationship impacts of the factors suggested in the model. Each of the factors shows positive relationships in their flow of connectivity which implies a reinforcement of impact on each order. It also shows the managers' and stakeholders' interest, interpretation and subtle rule of engagement; the presentation in the suggested model can prompt the practicing managers and stakeholders to develop their response to whistleblowing with suitable ideas and information needed, to provide conviction in the content of their response (see Richardson, 2011; Layton, 2012; Pota, 2018). These factors are further discussed in the next section.

Further discussion on identified factors for effective whistleblowing and interpretation

Manager's skills development

Findings from extant literature suggest that effective skills development and exertion are required for effective management of whistleblowing and interpretation. However, whistleblowing incidents can emanate from either within the internal or external operational environment. The manager's skills entail his ability to deal with the complexities and pressure associated with the emergence of a whistleblowing incident. This includes the demand to combine, compare and separate the ideas and information of an act of whistleblowing to develop an in-depth understanding of the critical facts embedded in whistleblowing incidents. A whistleblowing incident can be structured as a direct accusation of management, abusive supervision, oppressive leadership practice or unethical product packaging and deliveries (Zhou et al., 2021).

The critical essence of whistleblowing is to seek attention for investigation, clarification and improvement. A crucial skill that requires continuous attention of the manager and other parties to whistleblowing and interpretation among Nigerian organizations is the ethical balance and morals behind the incident. According to researchers, morals seek to go beyond ordinary intention to entail the intrinsic values embedded in the whistleblowing process. It involves learning and the possibility of improving existing practices that can generate better values and satisfaction (Latan *et al.*, 2021; Izevbigie and Omozusi, 2021).

The practicing manager is expected to exert his professional skills to project a working approach to address it through a suitable response that can restore a fair business operational practice while striving to achieve set objectives (Figure 1). However, applying the manager's skills is subject to the prevailing context under which the management of whistleblowing and interpretation is exerted (Midgley, 2000; Oyewunmi and Oyewunmi, 2022). This factor raises the question of whether the management and interpretation of whistleblowing should be based on global best practices or just the prevailing context. The stance of the study is that practicing managers need to create a critical balance between the two sides at each stage of the process of addressing an emerging act of whistleblowing. This, therefore, suggests that every act of whistleblowing presents the demands for effective deployment of the manager's skills in representing both the organization and the interest of the affected stakeholders through consultation (Figure 1).

Therefore, organizational managers need to embrace the responsibility to continuously be abreast with the right information and project a process of constructive consultation with the right stakeholders. Moreover, systems dynamics conceptual model, as applied in this study depicts the level of impacts on connectivity between variables such as manager's skills development and its impacts in terms of interdependence of effects such as the moral values embedded in whistleblowing incidents.

Although personal characteristics such as the manager's emotions, interests and sentiments can sometimes interfere with his professional ability to manage whistleblowing incidents, the skilful application of acquired knowledge and understanding of the business environment is fundamental to his striving to address whistleblowing activities. Tripermata *et al.* (2022), in their study in the Indonesian background, observed that personal behavioural control significantly affects the manager's ability to develop the proper response to the demands of whistleblowing. They note that individual behavioural control is relevant to the ethical balancing of response to whistleblowing by an organization. This is held as a critical managerial skill in this study. It is crucial to effectively address specific whistleblowing incidents, such as scandal and blackmail, with the right intelligent approach to keep their operations in full focus while addressing the emerging whistleblowing. This corroborates Kohn and Kostyack (2021) argument. They note that while whistleblowing can be tasking and disruptive to an organization's operational system, the practicing manager can skilfully manipulate the process to the organization's advantage while addressing the demands encapsulated in the whistleblowing incident.

Legal system support

The interpretation and reaction to a whistleblowing incident require the legal system's support (Figure 1). According to Ufua *et al.* (2020a, 2020b, 2020c), the legal system provides the laws that govern the operations of business activities, such as the management and interpretation of whistleblowing. The legal system projects the rules of engagement among parties concerned with whistleblowing and interpretation. It also creates a platform for a fair and legitimate process to manage the response to whistleblowing in the business environment (Igboji, 2018). According to Erin and Bamigboye (2020), failure to comply with the rules of engagement in response to whistleblowing can adversely affect corporate growth and sustainability in the long run. This study holds the argument that the effectiveness of the legal system determines the bound to

which the interpretation and management of whistleblowing can be appropriated. This is in tandem with the finding of Akinkugbe (2018), who observed a critical gap in the sufficiency of the legal provisions to protect the interest of whistleblowers in Nigeria compared to the Western world. He suggests the need for more stringent legal system provisions to create a fair platform for effective whistleblowing in Nigeria, with minimal room for retribution from the affected. Arguably, this can address all forms of intrigue and retaliatory use of whistleblowing as a blackmailing tool that can result in misinterpretation by some members of an organization or external persons.

However, a key issue is whether the practicing manager representing the organization's interest should be retributive against the whistleblower. Inyang (2020) emphasized the whistleblower's protection in an operational system to enhance probity in the business environment, noting that a unified regulatory framework is required to ensure maximum protection of whistleblowers and regulatory actions among organizational members. In other words, while the legal system provides for freedom of expression, which includes whistleblowing, the stance of this study is that the organizations or managers may not necessarily have to challenge the whistleblower but embrace a fair and legitimate operational practice that can provide clear justification for decisions and actions taken in the organization. Therefore, it requires the clear backing of the legal system to have better whistleblowing and interpretation (Gholami and Salihu, 2019).

Institutional stakeholders function

A functional institutional stakeholder structure is necessary for effective whistleblowing practice in Nigeria (Figure 1). This entails the functionality and reliability of the practicing organizations and managers to offer the needed support to effective whistleblowing and interpretation that can enhance positive effects in the business environments. According to Ufua et al. (2021a, 2021b), these institutional stakeholders include government agencies and other institutions, such as financial institutions, which are fundamental to the functioning of an organization and their approach to addressing complex issues such as whistleblowing. This study opines that compliance and engagement with these stakeholders can potentially enhance the development of beneficial values from organizational issues such as whistleblowing. Adequate institutional stakeholder support can provide a fair business environmental structure that can facilitate learning and improvement from an act of whistleblowing, whether from within or outside an organization (Figure 1; Martin et al., 2020).

Institutional stakeholders assume the responsibility for providing support and the supply of information and guidance to an organizational operation, especially in the management of whistleblowing, they can also support the practicing organization to adopt a suitable evaluation approach to ensure adequate response to an act of whistleblowing and interpretation and create a fair platform for operational improvement that can benefit the organization and stakeholders. Moreover, effective whistleblowing can result in overall economic growth and development (Figure 1; Babatunde et al., 2021; Kushner et al., 2021; Shao et al., 2023).

Suitable organizational policy response

Organizational response to an act of whistleblowing is essential to the effective interpretation of a whistleblowing incident that can result in decisions and actions for improvement. Extant literature shows that response provides the attached importance of whistleblowing. It also highlights the alignment between whistleblowing information and the direction of the operational pursuit of the organization. Although studies such as Zakaria et al. (2020) and Ebaid (2023), acknowledge the relevance of whistleblowing in the drive to keep an organization in its focus, the organizational response presents the practicing

organization with the responsibility to engage in the process of decision and adjustment on the policy guidelines to suit emerging changes that can project the sacred values and mitigate the possibility of profane effects on the entire organizational structure and pursuit (Asekhauno, 2022). This implies that the development of policy response by an organization, especially in a developing economic background like Nigeria, focused in this study, needs to be matched with the broad objective pursuit and other environmental influential factors such as the legal system and the underpinning organizational culture to preserve the identity of the organization (Simola, 2016; Kagias et al., 2023). This also underlines the heterogeneity of whistleblowing and interpretation among organizations, leaving the managers and organization members with the task of developing and adopting suitable policy approaches that reflect the broad organizational interest (Palumbo and Manna, 2020).

Consequently, the stance of this study is that practicing organization managers and leaders must embrace the challenges of effective policy development. This can herald the practical demonstration of decisions and actions that address emerging issues such as whistleblowing incidents and their interpretation, to continuously maintain the broad organizational drive and image of the various stakeholder groups. This is essential, especially when a whistleblowing incident is scandalous in its outlook and may require a defensive policy response to address it. In other words, when whistleblowing is not adequately addressed with a suitable policy response, the probability of profane effects on the organizational operations can become devastating to the pace of its progressions (Midgley, 2021). This raises the question of why practicing organizations must embrace suitable policy responses to whistleblowing and interpretation when there are inherent complex issues demanding attention. We argue that on the one hand, organizations operate on resources requiring practical managerial approaches to use towards the attainment of set objectives.

On the other hand, whistleblowing incidents, especially if embedded with scandalous accusations, can be devastating, resulting in profane effects such as demoralization and defamation of the organization concerned, and ultimately affecting critical operational spheres such as the market share and lack of stakeholders' confidence in the organization, and even government sanctions (Ufua et al., 2020a, 2020b, 2020c). These potentially challenging effects of whistleblowing and interpretation require the development of effective policy directions that provide respite and due response to an incidence of whistleblowing (Shang et al., 2023). The stance of this study is that policy response development cuts across cadres in an organizational structure, needing the collaboration of organizational members to address it effectively. This will result in a visible "ownership mentality" that encourages the embrace of organizational members in the policy direction of the organization to address identified whistleblowing challenges and concerns.

Organizational resilience

The level of resilience of the practicing organization determines the extent of the response that reflects the intended operational position of the organization. It leaves the responding managers and organization members to critically explore the operational structure through a process of engagement to develop responses to whistleblowing incidents. While organizations operate system structures that function in connectivity, the practice of resilience can provide a platform for effective response development and workload rescheduling that can enhance a productive response to emerging incidents such as whistleblowing (Zhou et al., 2021). Moreover, researchers reckon that whistleblowing incidents may not get the necessary response, due to the complex nature of their operational scope and environmental contexts. They acknowledge the relevance of speaking up by the whistleblowers, noting that organizations may need to increase their resilient capacities to stand a good chance of timely and suitable responses to

whistleblowing incidents. This can position them to maximize the utility of whistleblowing in the timely development of improvement approaches that can sufficiently address issues of concern to their operations (Rauwolf and Jones, 2019).

Organizations, therefore, need to be "live-ready" in their resilience to be able to respond both timely and suitably to acts of whistleblowing while they strive to maintain the focus of their operational objectives. Researchers and practitioners, especially in the Nigerian economy, explain that organizational resilience has embedded complexity that requires managers to use skills to address critical concerns such as whistleblowing. These may include compliance with rules of engagement, provision of resources needed to respond and effective time management with the broad intention to address emerging whistleblowing incidents (Figure 1; Siahaan *et al.*, 2023).

Stakeholder consultation

The need for stakeholder consultation is fundamental to the effective management of whistleblowing and interpretation. Although the act of whistleblowing can be helpful to the organization in certain ways such as probity, fairness and continuous improvement, the lack of due consideration of stakeholders' interests in the process of organizational decisions and actions in response to whistleblowing can result in unwanted profane events, in their operational systems that can create disruptions (Ufua *et al.*, 2019; Ufua *et al.*, 2022a, 2022b). However, the argument of this study, in addressing critical organizational issues such as whistleblowing and interpretation, requires the pragmatic show of stakeholder concerns to effectively address, intending to maintain organizational focus across its structure. Corroborating this, Samans and Nelson (2022) noted that considering the interest of the stakeholders in certain organizational decisions, such as in whistleblowing and interpretation, can enhance their overall commitment to the sustainability drive of the entire systems operated by the organization. It will also promote an environment of a cohesive ownership mentality and contribution towards addressing emerging issues that might result from whistleblowing and interpretation (Taheri *et al.*, 2023).

However, Ufua *et al.* (2018) argued that stakeholder consultation has embedded complexity in its appropriation, implying that issues such as time-consuming and difficulty in defining a stakeholder, resulting in issues, such as delayed decisions and actions, in addressing critical organizational concerns such as whistleblowing and interpretation, focused in this study. The broad argument of this study is that the drive for effective organizational practices and the protection of stakeholders' interests justify the demand for its consideration in the entire gamut of whistleblowing and interpretation in Nigeria. Stakeholder consultation, therefore, possesses the potential to provide an intrinsic assessment procedure of the impacts of whistleblowing and interpretation. This can result in an open window for adjustments to suit changes due to reactions among affected stakeholders (Liu *et al.*, 2022).

Ethical balance

Whistleblowing and interpretation require ethical backing from all parties involved or affected. This covers the morality that binds the ambience of whistleblowing and interpretation. Ethical balancing takes the practice of whistleblowing and interpretation legality to include morality. This study argues that an effective, moral balance of whistleblowing and interpretation would address the issue of intrinsic sentiments and parochial self-interest that may obstruct the broad interpretation and actions in response to whistleblowing. It also implies that the manager needs to place the organization's objectives ahead of personal sentiment to encourage the commitment of organizational members in the process of addressing whistleblowing (Smaili, 2023).

The stance of the study is that managers and organizational members need to embrace the challenge of finding an acceptable balance between these factors to address emerging

whistleblowing effectively. Okafor *et al.* (2020) noted that this can make potential whistleblowers more aware of the impact of any proposed act of whistleblowing and offer them the chance to weigh the options of whether to proceed or withdraw.

According to authors such as Ibidunni *et al.* (2022), an emerging occurrence such as whistleblowing can disrupt an operational organization process, needing the skills of the affected organization members and scarce resources to address. This leaves the organization with the burden of cost and other impacts required to defend its operational integrity against an act of whistleblowing. It is, therefore, arguable to note that it is a critical necessity for the potential whistleblower, whether from within or outside an organization, to duly consider both the legal and ethical justification of a proposed act of whistleblowing.

According to Valentine and Godkin (2019), whistleblowing provides a key moral value that can enhance the validity of an organization's decision process, which requires the manager's ethical juxtaposition to substantiate in running an operational process. This corroborates the argument of Andrade (2015), who noted that whistleblowing and interpretation might need a continuous reconceptualization to align the environmental changes that can influence its practices in an organization. It, therefore, implies that the moral justification of decision lines can enhance the implementation process, void of unnecessary waste and marginalization that can adversely affect the integrity of the organization (Figure 1). This also suggests that the practicing manager has the responsibility to weigh the intrinsic values and their decisions and actions in an operational process to ensure an acceptable moral balance that can sustain key operational indicators such as the market share and the corporate image of the organization (Kim and Seo, 2023). These would result in the avoidance of unpleasant effects such as fear, societal intrigue and stigma that can adversely affect the whistleblower, as well as encourage the practicing managers to embrace the challenge to address the issues raised in the act of whistleblowing (Apadore *et al.*, 2018; McIntosh *et al.*, 2019).

Finally, while the ethical balance is necessary for the effective management of whistleblowing in an organization, a key concern is the spatial meaning and interpretation of what can be considered ethical in addressing an act of whistleblowing. The stance of this study is that there is a necessity to adopt a departure from the universal view or what is largely known as absolute "best practices" to "idea practice" in the process of ethical balancing of managing whistleblowing and interpretation (Midgley, 2000; McCauley and Palus, 2021; Buli-Holmberg *et al.*, 2022). This can project the contextual valuation of interpretations and the morality embedded in decisions taken to address the emerging challenges of whistleblowing. We argue that it can harness the commitment of stakeholders to a process of joint development of working approaches to address whistleblowing challenges effectively.

Theoretical implication

The theoretical implication is that the management of whistleblowing and interpretation, especially in the context of a developing economy such as Nigeria, involves the recognition of the connectivity with other factors that are embedded in whistleblowing and interpretation. This is expressed in Figure 1, with positive sign ($+$), connoting reinforcement relationships between the factors suggested in the model. This implies that they are interconnected and project a positive effect on the broad management of whistleblowing and interpretation in the Nigerian context. For instance, the manager's response is to address the identified challenges of whistleblowing, and interpretation can determine systemic impacts on other parts of the structure of the organization concerned. It also connotes that the manager's skills and ability to understand the content of a blown whistle are fundamental to his ability to interpret and address emerging issues. This leaves the researchers with the responsibility to continue to contribute to the awareness and strive for the development of model approaches to improve managers' skills to maintain resilience in

line with the prevailing context. This will position them to be able to address emerging incidences of whistleblowing and interpretation that can keep their organizations on the path of their pursuit of set objectives (Smaili, 2023).

Furthermore, it also creates an avenue for more debates among researchers, on how the factors suggested in Figure 1, can be implemented by the stakeholders to maximize their positive impacts of effective management of whistleblowing and interpretation, to sustain the operational progression of the organization, which tends towards its success. Based on systems theory, this can also capture the impact of the connectivity between the emerging incidence of whistleblowing, the manager's response and the aftermath effects on their pursuit of set business objectives.

The stance of this study is that this is a conspicuous responsibility of the practicing managers and relevant stakeholders, to develop suitable systems view to the management of whistleblowing that can harness these positive effects in line with the prevailing contexts and the pursuit of set business objectives. Similarly, the use of systems dynamics conceptual model provided a deeper understanding of the factors discussed and also created a new lens for further debate about the development of whistleblowing and interpretation among researchers and practitioners in the Nigerian context.

Managerial implication

The managerial implication of this study signifies that the management of whistleblowing and interpretation requires a process that cannot be done in isolation, without the consideration and involvement of other stakeholders and the structure operated by an organization. As suggested in Figure 1, practicing managers need to continuously consider the impacts and requirements of these suggested factors on a systemic basis to strike a sustainable positive balance in the drive to maximize their impacts on the management of whistleblowing and interpretation, focused on in this study.

As already presented and discussed in Figure 1, practicing managers need to be acquainted with the key factors suggested in the model to enhance their development of approaches to adequately address the content of emerging incidents of whistleblowing in their operations. Based on systems view, this requires embracing collaboration with members and partners of an organization to effectively develop an understanding of the connectivity and impacts of these factors (e.g. managers' skills development, organizational resilience, legal system support, institutional stakeholders' function and ethical balance), on the process of response to an identified piece of whistleblowing (see Figure 1). Such collaboration can harness the expression of various views about a blown whistle and facilitate a better understanding, which can precede suitable interpretation, through the use of operational tools such as the systems dynamics conceptual model to develop relevant priorities of thoughts and ideas among stakeholders. That can enhance acceptable decisions and actions to address emerging issues from whistleblowing.

The view of this study is that the practicing managers and affected stakeholders have the responsibility, both to source relevant materials and information for implementation and to continuously evaluate the impact of response to whistleblowing, in tandem with the context of their operations, which can also set the stage for continuous improvement in their management of whistleblowing and interpretations in Nigeria.

Finally, the managerial implication here also requires that the interests and concerns of these stakeholders must be duly recognized to minimize the incidence of marginalization that can create disruptive effects on the process of whistleblowing and interpretation (Midgley, 2021).

Conclusion

This study explored the effect of whistleblowing and interpretation on organization operations in Nigeria. The key contribution of the study is the development of a system dynamic conceptual model based on findings from the literature, for effective management of whistleblowing and interpretation in the Nigerian context which portrays a reinforcement of the factors presented in the suggested model. These factors included the manager's skills development, legal system support, institutional stakeholders' function and ethical balance. The factors were presented in Figure 1 and were discussed to enhance learning on whistleblowing and interpretation in the Nigerian context, through the lens of systems dynamics conceptual model that underpinned this study. The study emphasized their relevance to the robust practice of whistleblowing and interpretation that can positively affect organizational functioning in Nigeria. The study also noted comprehensive consideration of stakeholder interest and drives to maintain organizational focus in the development of a response to whistleblowing, while also acting to minimize the adverse effects of whistleblowing incidents that can be devastating to organizational operations.

Limitation

A key limitation of this study is the exclusion of public sector practice of the concepts from its scope, basing it on a streamlined focus on the Nigerian private sector. Adding the public sector could have added some further diversity to learning and understanding of the management trends of whistleblowing and interpretation in Nigeria. It could have also created the opportunity to understand the differences in terms of the broad management and impacts of whistleblowing in the sectors. Another limitation is the sole focus on exploring and contributing to whistleblowing and interpretation in Nigeria. Authors feel that the study could have provided broader learning if other economic backgrounds such as those from developed or emerging economic backgrounds were focused on a comparative basis. This could have allowed the topic to be viewed through the lens of various continual and cultural backgrounds that influence whistleblowing and interpretation practices.

Recommendation

Based on the relevance of whistleblowing and its interpretation to organizational management and the limitations of this study, it is recommended that further studies consider the topic from a comparative perspective that includes the public and private sectors. Such research can explore other factors, such as cultural beliefs and accross national boundaries, regarding the practice of whistleblowing and interpretation. It can facilitate learning about contextual influences on the appreciation and management of whistleblowing among practicing organizations in Nigeria. This would further equip the managers and stakeholders with the support for effective and acceptable decision-making that can address emerging acts of whistleblowing while striving to keep the organization's integrity.

References

Achyarsyah, P. (2022), "Can investigative audit and whistleblowing systems prevent fraud?", *Atestasi: Jurnal Ilmiah Akuntansi*, Vol. 5 No. 1, pp. 124-136.

Akinkugbe, O.D. (2018), "Informal networks of corruption: assessing the challenges for public sector whistleblowing in Nigeria", *Jindal Global Law Review*, Vol. 9 No. 1, pp. 11-28.

Andersen, J. (2021), "A relational natural-resource-based view on product innovation: the influence of green product innovation and green suppliers on differentiation advantage in small manufacturing firms", *Technovation*, Vol. 104, p. 102254.

Andrade, J.A. (2015), "Reconceptualizing whistleblowing in a complex world", *Journal of Business Ethics*, Vol. 128 No. 2, pp. 321-335.

Apadore, K., Chin, C.Y., Qi, M.D.C., Yan, T.M., Yu-Sinn, W.G. and Min, W.T. (2018), "Factors affecting whistleblowing intention: an empirical study", *South East Asia Journal of Contemporary Business, Economics, and Law*, Vol. 15 No. 5, pp. 104-114.

Asekhauno, A.A. (2022), "Whistleblowing and the fight against corruption in contemporary Nigeria: moral-legal duty vs. fear of wrath", *Journal of Information Ethics*, Vol. 31 No. 1, pp. 30-42.

Ayres, R.M., Sauerbronn, F.F. and Fonseca, A.C.P.D.D. (2022), "Accounting professionals and whistleblowing: a typology of the influence of institutional logics", *Revista Contabilidade & Finanças*, Vol. 33 No. 89, pp. 248-264.

Babatunde, S.O., Lateef, S.A., Olanipekun, W.D. and Babalola, H.B. (2021), "The whistleblowing as a catalyst to sustainable economic growth and development in Nigeria: a conceptual review", *Asian People Journal (APJ)*, Vol. 4 No. 2, pp. 104-115.

Bamgbose, O. (2017), "Whistleblowing; the whistleblower; the Whistleblowing Act: a simple expose/ an easy to read discourse on the concept of whistleblowing", African Journal for the Psychological Study of Social Issues, available at: http://repository.ui.edu.ng/bitstream/123456789/4279/1/%2864%29ui_art_bamgbose_whistle_2017.pdf (accessed 17 March 2024).

Beardwell, J. and Claydon, T. (2007), *Human Resource Management: A Contemporary Approach*, 5th ed., Pearson Edu Ltd, England.

Berendt, B. and Schiffner, S. (2021), "Whistleblower protection in the digital age–why 'anonymous' is not enough. Towards an interdisciplinary view of ethical dilemmas", *International Review of Information Ethics*, Vol. 31, doi: 10.29173/irie479.

Bouville, M. (2008), "Whistleblowing and morality", *Journal of Business Ethics*, Vol. 81 No. 3, pp. 579-585.

Brunton, S.L., Budišić, M., Kaiser, E. and Kutz, J.N. (2021), "Modern Koopman theory for dynamical systems", arXiv preprint arXiv:2102.12086.

Buli-Holmberg, J., Sigstad, H.M.H., Morken, I. and Hjörne, E. (2022), "From the idea of inclusion into practice in the Nordic countries: a qualitative literature review", *European Journal of Special Needs Education*, Vol. 38 No. 1, pp. 1-16, doi: 10.1080/08856257.2022.2031095.

Cassematis, P.G. and Wortley, R. (2013), "Prediction of whistleblowing or non-reporting observation: the role of personal and situational factors", *Journal of Business Ethics*, Vol. 117 No. 3, pp. 615-634.

Checkland, P. (1981), *Systems Thinking, Systems Practice*, Wiley & Sons, Chickester.

Cooper, C., Pereira, V., Vrontis, D. and Liu, Y. (2023), "Extending the resource and knowledge-based view: insights from new contexts of analysis", *Journal of Business Research*, Vol. 156, p. 113523.

Cosenz, F. and Bivona, E. (2021), "Fostering growth patterns of SMEs through business model innovation. A tailored dynamic business modelling approach", *Journal of Business Research*, Vol. 130, pp. 658-669.

Dauda, K.O. (2017), "Whistleblowing policy as anti-corruption strategy: problems and prospects in Nigeria", *Lapai International Journal of Administration*, Vol. 1 No. 1, pp. 389-404.

Ebaid, I.E.S. (2023), "The courage of whistleblowing of prospective accountants: evidence from Saudi Arabia", *Journal of Applied Research in Higher Education*, Vol. 15 No. 3, pp. 713-730.

Erin, O. and Bamigboye, O.A. (2020), "Does whistleblowing framework influence earnings management? An empirical investigation", *International Journal of Disclosure and Governance*, Vol. 17 Nos 2/3, pp. 111-122.

Esavwede, J.P., Nwabuoku, M.O.I. and Mrabure, K.O. (2023), "Combating endemic corruption through whistleblowing in Nigeria. The need for a legal framework", *BiLD Law Journal*, Vol. 8 No. 1, pp. 122-132.

Florin, U. (2022), "On design dialogues: their roots, features, and usage ulrika florin", *Different Perspectives in Design Thinking*, CRC Press, Florida, pp. 108-130.

Forrester, J.W. (2007), "System dynamics—a personal view of the first fifty years", *System Dynamics Review*, Vol. 23 Nos 2/3, pp. 345-358.

Gholami, H. and Salihu, H.A. (2019), "Combating corruption in Nigeria: the emergence of whistleblowing policy", *Journal of Financial Crime*, Vol. 26 No. 1, pp. 131-145, doi: 10.1108/JFC-10-2017-0102.

Gueler, M.S. and Schneider, S. (2021), "The resource-based view in business ecosystems: a perspective on the determinants of a valuable resource and capability", *Journal of Business Research*, Vol. 133, pp. 158-169.

Hulland, J. (2020), "Conceptual review papers: revisiting existing research to develop and refine theory", *AMS Review*, Vol. 10 Nos 1/2, pp. 27-35.

Ibidunni, A.S., Ufua, D.E. and Opute, A.P. (2022), "Linking disruptive innovation to sustainable entrepreneurship within the context of small and medium firms: a focus on Nigeria", *African Journal of Science, Technology, Innovation and Development*, Vol. 14 No. 6, pp. 1591-1607, doi: 10.1080/20421338.2021.1975355.

Igboji, K.O. (2018), "Whistleblowing system: a recipe for monitoring corrupt activities in Nigerian universities", *The International Journal of Business and Technology*, Vol. 2 No. 2, pp. 76-85.

Inyang, U. (2020), "Whistleblowing as a corporate governance mechanism: a comparative analysis of employee-whistleblower protection in the United Kingdom and Nigeria", available at: SSRN 3547899. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=whistle+blowing+as+a+corporate+governance+mechanism%3A+a+comparative+analysis...&btnG=#d=gs_cit&u=%2Fscholar%3Fq%3Dinfo%3AxtYX-MvDJkMJ%3Ascholar.google.com%2F%26output%3Dcite%26scirp%3D0%26hl%3Den (accessed 21 March 2022).

Ismael, J., Losco, F., Quildrian, S., Sanchez, P., Pincemin, I., Lastiri, J. and Rompato, S. (2020), "Multidisciplinary approach to COVID-19 and cancer: consensus from scientific societies in Argentina", *Ecancermedicalscience*, Vol. 14, p. 1044, doi: 10.3332/ecancer.2020.1044.

Izevbigie, D.P.I. and Omozusi, O.F. (2021), "Whistleblowing as a fraud prevention strategy in Nigeria", *EPRA International Journal of Multidisciplinary Research (IJMR)*, Vol. 1, p. 506.

Jack, K., Levett-Jones, T., Ylonen, A., Ion, R., Pich, J., Fulton, R. and Hamshire, C. (2021), "Feel the fear and do it anyway"... nursing students' experiences of confronting poor practice", *Nurse Education in Practice*, Vol. 56, p. 103196.

Jiang, Y., Naqvi, M.H. and Abbas Naqvi, M.H. (2020), "Psychological predictors of facebook use: a literature review", *International Journal of Management, Economics and Social Sciences (IJMESS)*, Vol. 9 No. 2, pp. 113-130.

Kagias, P., Sariannidis, N., Garefalakis, A., Passas, I. and Kyriakogkonas, P. (2023), "Validating the whistleblowing maturity model using the Delphi method", *Administrative Sciences*, Vol. 13 No. 5, p. 120.

Kim, J.-S. and Seo, D. (2023), "Foresight and strategic decision-making framework from artificial intelligence technology development to utilization activities in small-and-medium-sized enterprises", *Foresight*, Vol. 25 No. 6, pp. 769-787, doi: 10.1108/FS-06-2022-0069.

Kohn, S.M. and Kostyack, J. (2021), "Whistleblower protection: an essential tool for addressing corruption that threatens the world's forests, fisheries and wildlife", *Targeting Natural Resource Corruption*, pp. 1-8, available at: www.whistleblowers.org/wp-content/uploads/2021/02/Topic-Brief-Whistleblower-Protection-An-Essential-Tool-for-Addressing-Corruption-that-Threatens-the-Worlds-Forests-Fisheries-and-Wildlife.pdf (accessed 24 May 2023).

Krtalić, M. and Dinneen, J.D. (2022), "Information in the personal collections of writers and artists: practices, challenges and preservation", *Journal of Information Science*, Vol. 50 No. 1, p. 1655515221084613.

Kushner, J., Cabrera, L. and Cabrera, D. (2021), "Systems evaluation: applying systems thinking to evaluation", in Cabrera, D., Cabrera, L. and Midgley, G. (Eds), *Routledge Handbook of Systems Thinking*, Routledge, London.

Latan, H., Chiappetta Jabbour, C.J. and Lopes de Sousa Jabbour, A.B. (2021), "Social media as a form of virtual whistleblowing: empirical evidence for elements of the diamond model", *Journal of Business Ethics*, Vol. 174 No. 3, pp. 529-548.

Layton, R.A. (2012), *Principles of Analytical System Dynamics*, Springer Science & Business Media, New York.

Lindhult, E., Sankaran, S. and Midgley, G. (2022), "Systemic innovation: towards a new paradigm in systems thinking and innovation", *Systems Research and Behavioral Science*, Vol. 39 No. 3, pp. 679-681, available at: file:///C:/Users/user/Downloads/FinalCallforPapers.pdf (accessed 16 February 2023).

Liu, T., Suprun, E., Stewart, R.A. and Duran, S. (2022), "Developing a framework for assessing the readiness of entities in the construction industry in addressing modern slavery", *Sustainable Production and Consumption*, Vol. 31, pp. 139-151.

Luhmann, N., Baecker, D. and Gilgen, P. (2013), *Introduction to Systems Theory*, pp. 50-5900, Cambridge: Polity.

Lund, B.D., Wang, T., Mannuru, N.R., Nie, B., Shimray, S. and Wang, Z. (2023), "ChatGPT and a new academic reality: artificial intelligence-written research papers and the ethics of the large language models in scholarly publishing", *Journal of the Association for Information Science and Technology*, Vol. 74 No. 5, pp. 570-581.

McCauley, C.D. and Palus, C.J. (2021), "Developing the theory and practice of leadership development: a relational view", *The Leadership Quarterly*, Vol. 32 No. 5, p. 101456.

McIntosh, T., Higgs, C., Turner, M., Partlow, P., Steele, L., MacDougall, A.E., Connelly, S. and Mumford, M.D. (2019), "To whistleblow or not to whistleblow: affective and cognitive differences in reporting peers and advisors", *Science and Engineering Ethics*, Vol. 25 No. 1, pp. 171-210.

MacGregor, J. and Stuebs, M. (2014), "The silent Samaritan syndrome: why the whistle remains unblown", *Journal of Business Ethics*, Vol. 120 No. 2, pp. 149-164.

Maroun, W. and Atkins, J. (2014), "Section 45 of the Auditing Profession Act: blowing the whistle for audit quality?", *The British Accounting Review*, Vol. 46 No. 3, pp. 248-263.

Martin Jr, D., Prabhakaran, V., Kuhlberg, J., Smart, A. and Isaac, W.S. (2020), "Participatory problem formulation for fairer machine learning through community based system dynamics", *arXiv preprint arXiv:2005.07572*.

Miceli, M.P. and Near, J.P. (2005), "Standing up or standing by: what predicts blowing the whistle on organizational wrongdoing?", in Martocchio, J.J. (Ed.), *Research in Personnel and Human Resources Management (Research in Personnel and Human Resources Management)*, Emerald Group Publishing, Bingley, Vol. 24, pp. 95-136, doi: 10.1016/S0742-7301(05)24003-3.

Midgley, G. (2000), *Systemic Intervention: Philosophy, Methodology and Practice*, Kluwer Academic/Plenum Publishers, London.

Midgley, G. (2021), "A systems theory of marginalization and its implications for systemic intervention", *Systems Analysis in Economics–2020: Proceedings of the 6th International Research & Practice Conference-Biennale (09-11 December, 2020). Moscow*, "Science" Publishing House, pp. 54-57.

Midgley, G. and Lindhult, E. (2021), "A systems perspective on systemic innovation", *Systems Research and Behavioral Science*, Vol. 38 No. 5, pp. 635-670.

Naumann, R.B., Guynn, I., Clare, H.M. and Lich, K.H. (2022), "Insights from system dynamics applications in addiction research: a scoping review", *Drug and Alcohol Dependence*, Vol. 231, p. 109237.

Near, J.P. and Miceli, M.P. (2008), "Wrongdoing, whistleblowing, and retaliation in the US government: what have researchers learned from the Merit Systems Protection Board (MSPB) survey results?", *Review of Public Personnel Administration*, Vol. 28 No. 3, pp. 263-281.

Nwosu, C. (2023), "Exploring the effectiveness of anti-corruption laws in Nigeria: a comparative study of legal frameworks and practical outcomes", *American Journal of Law and Political Science*, Vol. 2 No. 1, pp. 67-75.

Ogbe, H.E. and Oyibokure, G.I. (2023), "Impact assessment of the COVID-19 pandemic and the Nigerian judicial system", *Social Science Research*, Vol. 9 No. 1.

Okafor, O.N., Adebisi, F.A., Opara, M. and Okafor, C.B. (2020), "Deployment of whistleblowing as an accountability mechanism to curb corruption and fraud in a developing democracy", *Accounting, Auditing & Accountability Journal*, Vol. 33 No. 6, pp. 1335-1366.

Olonade, O.Y., Oyibode, B.O., Idowu, B.O., George, T.O., Iwelumor, O.S., Ozoya, M.I. and Adetunde, C.O. (2021), "Understanding gender issues in Nigeria: the imperative for sustainable development", *Heliyon*, Vol. 7 No. 7, p. e07622.

Onyango, G. (2021), "Whistleblowing behaviours and anti-corruption approaches in public administration in Kenya", *Economic and Political Studies*, Vol. 9 No. 2, pp. 230-254.

Orlu, L., Isukul, A.C. and Odiche, W. (2021), "Can whistleblowing policy promote the Nigerian economy? A review", *Asian Research Journal of Current Science*, Vol. 3 No. 1, pp. 6-10.

Oyewunmi, A.E. and Oyewunmi, O.A. (2022), "Speaking silence: abusive supervision, subordinates' citizenship behavior, and whistleblowing intention", *SAGE Open*, Vol. 12 No. 1, p. 21582440221079912.

Palumbo, R. and Manna, R. (2020), "Uncovering the relationship between whistleblowing and organizational identity: some preliminary evidence from Italian publicly owned universities", *International Journal of Public Sector Management*, Vol. 33 No. 1, pp. 94-112, doi: 10.1108/IJPSM-02-2019-0030.

Pamungkas, I.D., Wahyudi, S. and Achmad, T. (2020), "Whistleblowing system and fraud early warning system on village fund fraud: the Indonesian experience", *International Journal of Environmental Science*, Vol. 5, pp. 151-158.

Parhizkar, T., Utne, I.B., Vinnem, J.E. and Mosleh, A. (2021), "Supervised dynamic probabilistic risk assessment of complex systems, part 2: application to risk-informed decision making, practice and results", *Reliability Engineering & System Safety*, Vol. 208, p. 107392.

Pota, H.R. (2018), *The Essentials of Power System Dynamics and Control*, Springer, Berlin, Vol. 1310.

Premium Times Newspaper Report (2022), "Group launches whistleblowing platform for reporting corruption", available at: www.premiumtimesng.com/news/more-news/542637-group-launches-whistleblowing-platform-for-reporting-corruption.html (accessed 1 May 2023).

Rauwolf, P. and Jones, A. (2019), "Exploring the utility of internal whistleblowing in health care via agent-based models", *BMJ Open*, Vol. 9 No. 1, p. e021705.

Richardson, G.P. (2011), "Reflections on the foundations of system dynamics", *System Dynamics Review*, Vol. 27 No. 3, pp. 219-243.

Samans, R. and Nelson, J. (2022), *Sustainable Enterprise Value Creation: Implementing Stakeholder Capitalism Through Full ESG Integration*, Springer Nature, London, p. 289.

Sam-Eleyi, F. and Peace, O.U. (2023), "Whistleblowing and office manager's commitment in construction companies in Rivers state", *BW Academic Journal*, p. 10.

Shang, M., Okorie, U.E., Hang, Y., Jin, X. and Ufua, D.E. (2023), "National debt management and business sustainability in Africa's largest economy: a focus on the private sector", *Plos One*, Vol. 18 No. 10, p. e0293582.

Shao, D., Ishengoma, F.R., Alexopoulos, C., Saxena, S., Nikiforova, A. and Matheus, R. (2023), "Integration of IoT into e-government", *Foresight*, Vol. 25 No. 5, pp. 734-750, doi: 10.1108/FS-04-2022-0048.

Shepherd, S.P. (2014), "A review of system dynamics models applied in transportation", *Transportmetrica B: Transport Dynamics*, Vol. 2 No. 2, pp. 83-105.

Siahaan, M., Suharman, H., Fitrijanti, T. and Umar, H. (2023), "When internal organizational factors improve detecting corruption in state-owned companies", *Journal of Financial Crime*, Vol. 31 No. 2, pp. 376-407, doi: 10.1108/JFC-11-2022-0292 (accessed 19 March 2024).

Simola, S. (2016), "Mentoring the morally courageous: a relational cultural perspective", *Career Development International*, Vol. 21 No. 4, pp. 340-354.

Smaili, N. (2023), "Building an ethical culture by improving conditions for whistleblowing", *Journal of Business Strategy*, Vol. 44 No. 1, pp. 37-43.

Smith, C.M. and Shaw, D. (2019), "The characteristics of problem structuring methods: a literature review", *European Journal of Operational Research*, Vol. 274 No. 2, pp. 403-416.

Taheri, G., Mohammadi, F. and Jami Pour, M. (2023), "What drives social co-creation in tourism? An empirical study", *Foresight*, Vol. 26 No. 1, pp. 114-135, doi: 10.1108/FS-01-2023.

The Athletic Report (2020), "The whistleblower whose leaks led to Manchester City's Champions League ban", available at: https://theathletic.com/1866642/2020/06/12/whistleblower-hacking-manchester-city-rui-pinto/ (accessed 31 January 2022).

Tomo, A., De Nito, E., Canonico, P., Mangia, G. and Consiglio, S. (2020), "Stories of grey zone between corruption and whistleblowing: insights from the Italian public administration", *Meditari Accountancy Research*, Vol. 28 No. 6, pp. 1037-1058.

Tripermata, L., Syamsurijal, S., Wahyudi, T. and Fuadah, L.L. (2022), "Whistleblowing intention and organizational ethical culture: analysis of perceived behavioral control in Indonesia", *The Journal of Industrial Distribution & Business*, Vol. 13 No. 1, pp. 1-9.

Uddin, G., Monehin, A.O. and Osuji, E. (2020), "Strengthening financial system regulation: the Nigerian case", *International Journal of Management, Economics and Social Sciences*, Vol. 9 No. 4, pp. 286-310.

Ufua, D.E., Emielu, E.T., Olujobi, O.J., Lakhani, F., Borishade, T.T., Ibidunni, A.S. and Osabuohien, E.S. (2021a), "Digital transformation: a conceptual framing for attaining Sustainable Development Goals 4 and 9 in Nigeria", *Journal of Management & Organization*, Vol. 27 No. 5, pp. 836-849.

Ufua, D.E., Ibidunni, A.S., Akinbode, M.O., Adeniji, C.G. and Kehinde, B.E. (2021b), "Value stream mapping, a tool for optimum implementation of systemic lean intervention: a case study of a livestock commercial farm in Nigeria", *International Journal of Services and Operations Management*, Vol. 39 No. 3, pp. 399-414.

Ufua, D.E., Olokundun, A.M., Ogbari, M.E. and Atolagbe, T.M. (2019), "Achieving zero waste operation in a private organization through extended stakeholders' consultation: a case in the Niger Delta Region, Nigeria", *International Journal of Mechanical Engineering and Technology*, Vol. 10 No. 2, pp. 155-168.

Ufua, D.E., Olonade, O.Y., Yaseen, M., Dada, J.A., Olujobi, O.J. and Osabuohien, E. (2022a), "Intrinsic conflict among Nigerian public security forces: a systems model for compliant security service delivery in Nigeria", *Systemic Practice and Action Research*, Vol. 35 No. 6, pp. 809-827, doi: 10.1007/s11213-022-09593-0.

Ufua, D.E., Olujobi, O.J., Ogbari, M.E., Dada, J.A. and Edafe, O.D. (2020a), "Operations of small and medium enterprises and the legal system in Nigeria", *Humanities and Social Sciences Communications*, Vol. 7 No. 1, pp. 1-7.

Ufua, D.E., Papadopoulos, T. and Midgley, G. (2018), "Systemic lean intervention: enhancing lean with community operational research", *European Journal of Operational Research*, Vol. 268 No. 3, pp. 1134-1148.

Ufua, D.E., Salau, O.P., Dada, J.A. and Adeyeye, M.O. (2020b), "Application of systems approach to achieving cleaner and sustainable environment: a study of waste dumping issue on Idiroko Road, Ota, Ogun State, Nigeria", *International Journal of Environmental Science and Technology*, Vol. 17 No. 5, pp. 2835-2844.

Ufua, D.E., Salau, O.P., Ikpefan, O., Dirisu, J.I. and Okoh, E.E. (2020c), "Addressing operational complexities through re-inventing leadership style: a systemic leadership intervention", *Heliyon*, Vol. 6 No. 7, p. e04270.

Ufua, D.E., Salau, O.P., Saleem, O., Ogbari, M.E., Osibanjo, A.O., Osabuohien, E. and Adeniji, A.A. (2022b), "Systems approach to address human resource issues: a case in a commercial livestock farm in Southern Nigeria", *SAGE Open*, Vol. 12 No. 2, p. 21582440221093370.

Ugwuozor, F.O. and Onwurah, B.C. (2022), "Comparative assessment of the influence of university students' exposure to business ethics education", *Journal of Legal, Ethical and Regulatory Issues*, Vol. 25 No. 1, pp. 1-16.

Ullah, S., Ahmad, T., Mehmood, T. and Sami, A. (2023), "Innovation and economic performance of firms in National Science and Technology Park, Islamabad, Pakistan", *Foresight*, Vol. 25 No. 5, pp. 633-648, doi: 10.1108/FS-08-2021-0151.

Valentine, S. and Godkin, L. (2019), "Moral intensity, ethical decision making, and whistleblowing intention", *Journal of Business Research*, Vol. 98, pp. 277-288.

Weick, K.E. (2021), "Sensemaking and whistleblowing", *Whistleblowing, Communication and Consequences*, Routledge, London, pp. 81-92.

White, K., Habib, R. and HardistyD, J. (2019), "How to SHIFT consumer behaviors to be more sustainable: a literature review and guiding framework", *Journal of Marketing*, Vol. 83 No. 3, pp. 22-49.

Wilkes, L.M., Peters, K., Weaver, R. and Jackson, D. (2011), "Nurses involved in whistleblowing incidents: sequelae for their families", *Collegian*, Vol. 18 No. 3, pp. 101-106.

Zakaria, M., Abd Manaf, K. and Rahman, R.A. (2020), "An internal whistleblowing policy for a Malaysian City Council—a qualitative approach", *PalArch's Journal of Archaeology of Egypt/Egyptology*, Vol. 17 No. 2, pp. 377-391.

Zhou, Q., Li, G., Chen, Q. and Li, J. (2021), "Guaranteeing timely response to changes of monitored objects by assigning deadlines and periods to tasks", *ACM Transactions on Embedded Computing Systems (TECS)*, Vol. 20 No. 5s, pp. 1-22.

Zhou, L., Liu, Y., Chen, Z. and Zhao, S. (2018), "Psychological mechanisms linking ethical climate to employee whistleblowing intention", *Journal of Managerial Psychology*, Vol. 33 No. 2, pp. 196-213.

Further reading

Butler, J.V., Serra, D. and Spagnolo, G. (2020), "Motivating whistleblowers", *Management Science*, Vol. 66 No. 2, pp. 605-621.

Devine, T.M. and Aplin, D.G. (1986), "Abuse of authority: the office of the special counsel and whistleblower protection", *Antioch Law Journal*, Vol. 4 No. 5, pp. 5-71.

Grosz, B.J. and Kraus, S. (1996), "Collaborative plans for complex group action", *Artificial Intelligence*, Vol. 86 No. 2, pp. 269-357.

Karpacheva, E. and Hock, B. (2023), "Foreign whistleblowing: the impact of US extraterritorial enforcement on anti-corruption laws in Europe", *Journal of Financial Crime*, Vol. 31 No. 1, pp. 1-13.

Miceli, M.P. and Near, J.P. (1985), "Characteristics of organizational climate and perceived wrongdoing associated with whistleblowing decisions", *Personnel Psychology*, Vol. 38 No. 3, pp. 525-545.

Miceli, M.P. and Near, J.P. (1988), "Individual and situational correlates of whistleblowing", *Personnel Psychology*, Vol. 41 No. 2, pp. 267-281.

Near, J.P. (2020), "Review of whistleblowing, toward a new theory by Kate Kenny", *Journal of Business Ethics*, Vol. 165 No. 4, pp. 753-755.

O'Sullivan, P. and Ngau, O. (2014), "Whistleblowing: a critical philosophical analysis of the component moral decisions of the act and some new perspectives on its moral significance", *Business Ethics: A European Review*, Vol. 23 No. 4, pp. 401-415.

Shonhadji, N. and Maulidi, A. (2021), "The roles of whistleblowing system and fraud awareness as financial statement fraud deterrent", *International Journal of Ethics and Systems*, Vol. 37 No. 3, pp. 370-389, doi: 10.1108/IJOES-09-2020-0140.

Ufua, D.E. (2020), "Exploring the effectiveness of boundary critique in an intervention: a case in the Niger Delta Region, Nigeria", *Systemic Practice and Action Research*, Vol. 33 No. 5, pp. 485-499.

Corresponding author

Daniel E. Ufua can be contacted at: daniel.ufua@covenantuniversity.edu.ng