

INFORMATION ETHICS ENFORCEMENT CHALLENGES IN THE REAL ESTATE INDUSTRY: A STUDY OF THE EMERGING ECONOMY

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Abstract

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The South African real estate industry contributes to job creation, economic development and poverty eradication (Estate Agency Affairs Board [EAAB], 2020). However, it is challenged by unethical, unregistered, and non-complying property practitioners firms (EAAB, 2018). Moreover, some firms have inefficient systems that fail to combat hacking and cybercrime (Jardine, 2015). Although firms have strategies in place, there are still instances of unethical behaviour. The accuracy of information is also a problem in the sector. The sector also encounters illegal access including breaking password-protected websites (Johnson, 2015). Hence, this research aimed to examine the extent to which firms enforce information ethics (IE) and to explore the challenges experienced by the firms in the Gauteng province when enforcing IE. The research was both qualitative and quantitative in nature and web-based questionnaires and in-depth interviews were used to collect primary data. The research found that property practitioners firms enforce IE to a great extent. However, they do so with challenges, namely, lack of trust from clients, stricter legislative requirements of keeping records, cybercrime and hacking, lack of physical and electronic storage of information, and clients' information easily accessible at the Deeds Office. Property practitioners firms should strive to enforce IE to a greater extent while reducing and eliminating these challenges.

Keywords: Information Ethics, Information Ethics Enforcement, Real Estate Industry, Property Practitioners Firms, Intellectual Property

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1. INTRODUCTION

The real estate industry plays a key role in the global economy (Hong, 2022). It creates wealth and jobs for people all over the world (Cai et al., 2021). The real estate industry contributes 11% to the growth domestic product (GDP) of the United States of

America and 22% to that of China (Weinstock, 2023; Rogoff & Yang, 2022). The South African real estate industry contributes highly to poverty alleviation, skills development, and job creation (EAAB, 2018). However, property practitioners firms fail to comply with the Estate Agency Affairs Board (EAAB) code of conduct (EAAB, 2021). Moreover, the South African

real estate industry is characterised by illegal unregistered estate agents (EAAB, 2022). Furthermore, some property practitioners firms fail the annual audit leading to their fidelity fund certificate (FFC) not being renewed (EAAB, 2019b). The real estate industry is also characterised by inefficient systems, increased cyberattacks, and system hacking (EAAB, 2019b). These inefficient systems lead to customers and potential customers receiving e-mails from unknown senders (Johnson, 2015; EAAB, 2019b). It is also associated with incorrect or incomplete information for decision-making. This infringes on applied ethics, namely, information ethics (IE). Moreover, it negatively affects the reputation of the sector due to a slow resolution of problems and complaints (EAAB, 2019b). Recently, some scholars refer to IE as digital ethics (Morán-Reyes, 2022). However, digital ethics is inclusive of information and technology whereas IE is solely focused on information (Taddeo et al., 2019). Firms across the globe struggle with IE enforcement challenges (Tohara et al., 2021). An excuse usually given for unethical behaviours concerning information is a rapid change in technology (Héder, 2020; Hoffmann & Hahn, 2020).

This study aimed to examine the extent of IE enforcement and the challenges experienced by property practitioners firms during the enforcement. The study followed a mixed-method approach, specifically, qualitative through interviews and quantitative through questionnaires. This study aimed to answer the following research questions:

RQ1: What is the extent of IE enforcement?

RQ2: What are the challenges of IE enforcement?

The study is guided by the ethical frameworks of Rest (1986). According to these theoretical frameworks, individuals, locals, and metropolitans are influenced by different ethical dimensions. The study established that property practitioners firms enforce IE to a certain extent and experience several challenges.

The remainder of this paper is structured as follows: Section 2 discusses the review of relevant literature. Section 3 describes the research methodology followed in the study. Section 4 analyses the qualitative data and Section 5 analyses the quantitative data. Section 6 discusses the findings. Section 7 provides conclusions of the study and recommendations for future research.

2. LITERATURE REVIEW

This section provides a literature review on the importance of IE in the South African real estate industry. As with other industries, globally, the real estate industry has been negatively affected by the COVID-19 pandemic and it is still recovering (D'Lima et al., 2022). Although the world has been moving towards smart cities, the COVID-19 pandemic fast-tracked such movement (Fields & Rogers, 2021; Balemi et al., 2021). Fields and Rogers (2021) conclude that investment in digital innovations is increasing in the real estate industry. Smart cities are reliant on big data and the Internet of Things which are part of the Fourth Industrial Revolution (4IR) (D'Lima et al., 2022). 4IR is dependent on information and there are ethical

issues related to the use of information (Munawar et al., 2020). This study focuses on IE challenges in the South African real estate industry.

The field of IE is still in its infancy and the literature is limited. There are four elements of IE, namely, privacy, accuracy, property, and accessibility (PAPA) (Mason, 1986). According to Mason (1986), these elements are described using questions as follows:

- *Privacy*: What information about oneself or one's associations must a person reveal to others, under what conditions, and with what safeguards? What things can people keep to themselves and not be forced to reveal to others?

- *Accuracy*: Who is responsible for the authenticity, fidelity, and accuracy of information? Similarly, who is to be held accountable for errors in information?

- *Property*: Who owns information? What are the just and fair prices for its exchange? Who owns the channels through which information is transmitted and distributed?

- *Access*: What information does a person or an organisation have a right or a privilege to obtain, under what conditions, and with what safeguards?

2.1. Ethics theoretical framework

Firms that operate in different industries entrust their managers with the responsibility of enforcing ethical principles and codes. The South African real estate industry is not an exception. It is guided by the code of conduct and the Property Practitioner Act No. 22 of 2019 (Republic of South Africa, 2019). The code of ethics and code of conduct are guided by ethics theoretical frameworks. Ethics theoretical frameworks help individuals, organisations, communities, and countries to take ethical decisions and actions. There are many theoretical frameworks of ethics in the existing literature. For example, Kohlberg (1969, 1984) attempted to explain how individuals think about moral dilemmas, not how they actually behave in a particular situation.

Rest (1986) speaks of four psychological processes which are considered to influence behaviour ethically, namely, ethical interpretation, ethical judgment, selection of the moral action, and implementation of the moral course of action.

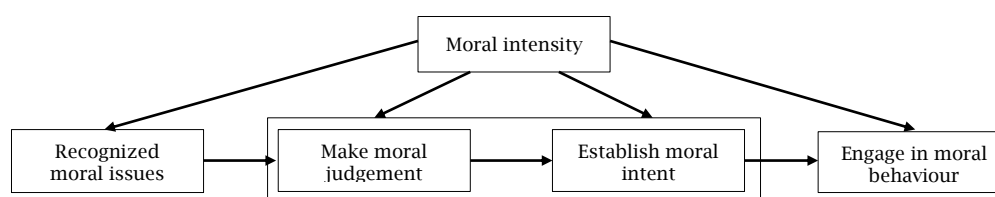
Trevino's (1986) individual factors (such as moral development, locus of control, ego strength, etc.) are considered the important determinants of ethical decision-making.

Bommer et al.'s (1987) framework identified several environments that may influence managers' ethical decisions and actions, namely, the work environment, governmental/legal environment, social environment, professional environment, and personal environment.

Jones's (1991) framework emphasized the characteristics of the moral issue itself.

However, Rest's (1986) ethics theoretical framework is the most recognized and recommended as it is assumed to lead to ethical decisions and actions. Its four core steps are said to lead to ethical decision-making. The steps of this ethical theoretical framework are depicted in Figure 1 below.

Figure 1. Ethical decision-making model



Source: Rest (1986).

2.2. Definition and history of information ethics

There is no universally accepted definition of IE. This is because IE is cross-disciplinary and cross-cultural and diversifies as new technologies, entering the milieu, and adds to already existing entanglements (Ocholla et al., 2010; Dadzie, 2011). According to Britz and Buchanan (2010), the scope of IE focuses on the moral questions relating to the life cycle of information as it pertains to its generation, gathering, organisation, storage, retrieval, and use. They point out that IE examines issues related to privacy, security, access to information, intellectual freedom, quality and integrity of information as well as intellectual property rights. Britz and Buchanan's (2010) definition of IE is comprehensive, self-explanatory, and therefore acceptable for this study.

IE was incepted in the 1980s (Buchanan, 2011). The creation of this concept has been credited to Koenig et al. (1981). The concept was used to discuss issues surrounding information (or data) confidentiality, reliability, quality, and usage. It was not surprising that the concept evolved initially with library and information science, and later was embraced by many other disciplines (Dadzie, 2011). IE has evolved from its origins in library and information science (LIS) to become a multidimensional field of interest in several scholarly disciplines, including information systems (IS) (Martinsons & Ma, 2009). Mason (1986) identified four types or categories of issues that involve IE (i.e., privacy, accuracy, property, and access). Severson (1997) argued that the major principles of IE are, namely, respect for intellectual property, respect for privacy, fair representation (accuracy), and non-maleficance.

2.3. South African real estate industry and information ethics

Many people over the world used the real estate industry to create wealth (Tostevin, 2021). According to Tostevin (2021), the global real estate industry was worth USD326.5 trillion in 2020. It contributes a huge percentage to the GDP of leading countries such as the USA and China. It contributes 11% and 22% to the GDP of the USA and China, respectively (Weinstock, 2023; Rogoff & Yang, 2022). In Vietnam, the real estate industry has a positive contribution to the GDP (Tien et al., 2019). The real estate industry in Indonesia's performance is very excellent and gives many people opportunities to create wealth (Pattiruhu & Paais, 2020). The industry is attracting foreign direct investment (FDI) in Dubai (Joghee et al., 2020). The South African real estate industry is valued at R5.8 trillion (SA Commercial Prop News, 2016). It is sized at R5.3 trillion with a further R520 billion land officially zoned for commercial and residential development. The real

estate industry, daily, faces ethical challenges related to IE, such as dealing with cyberattacks (KPMG, 2012). It was reported by Friedman and Kahn (2002), that some of the cyberattacks include hacking offences, like breaking the password or password-protected websites and password protection on a computer system. To address these IE challenges, Mason (1986) introduced strategies and management tools used to protect privacy, accuracy, intellectual property, and accessibility efficiently.

Data protection legislation is used to protect privacy and abuse of information (South African Law Reform Commission, 2005). According to the five-year strategic plan for 2019–2024 (EAAB, 2019b), the South African real estate industry is characterised by incorrect or incomplete information that negatively affects decision-making (EAAB, 2019b). However, there is an emphasis on accuracy particularly in information reporting (EAAB, 2022). The South African real estate industry account for intellectual property hence it is part of the EAAB financial statements (EAAB, 2021; EAAB, 2022). Property practitioners firms are striving to put systems and processes in place to protect the intellectual property of their clients more effectively and efficiently (EAAB, 2021).

Property practitioners firms encounter illegal access to their systems, including breaking the password-protected websites and password protection on a computer system (Phillip, 2002). The South African real estate industry is guided by the Promotion of Access to Information Act No. 2 of 2000 (EAAB, 2019b). The EAAB encourages access to transaction information for the public by reducing transaction costs (EAAB, 2019b). Moreover, access to educational material by the general public and industry bodies is encouraged (EAAB, 2021).

2.4. Information ethics laws in the South African real estate industry

In the real estate industry, the law determines the rights and responsibilities of individuals and firms (Lues, 2007). The EAAB emphasises that property practitioners should exercise the highest level of ethical behaviours in all business conducts. The Social and Ethics Committee within EAAB now known as Property Practitioners Regulatory Authority (PPRA) is entrusted with the responsibility of raising ethical standards (EAAB, 2022). Property practitioners firms in South Africa follow the Protection of Personal Information Act No. 4 of 2013 (Department of Justice, 2013) along with the Promotion of Access to Information Act (PAIA), No. 2 of 2000 (Republic of South Africa, 2000), which promotes the culture of transparency, accountability, and good governance in both the private and public industries. The sector also follows the Financial

Intelligence Centre Act (FICA), No. 38 of 2001 (Republic of South Africa, 2001), which brings South Africa in line with similar legislation in other countries designed to reveal the movement of money derived from unlawful activities, thereby curbing money laundering and other criminal activities (Republic of South Africa, 2001).

The Estate Agency Affairs Act No. 112 of 1976 (Republic of South Africa, 1976) provides for the establishment of an EAAB and an Estate Agents Fidelity Fund for the control of certain activities of property practitioners in the public interest; and for incidental matters (Republic of South Africa, 1976). In addition to the acts, Alexander and Muhlebach (2014) state that property practitioner firms utilise a variety of systems and processes to manage IE.

2.5. Organisations for information ethics in the South African real estate industry

Various organisations may influence IE, namely, the Institute of Real Estate Management (IREM) and the EAAB. The IREM is an international force of 20,000 individuals united to advance the profession of real estate industry management through training, professional development, and collaboration (IREM, 2020). The EAAB regulates property practitioners by ensuring that all persons carrying out the activities of a property practitioner as a service to the public are registered with the EAAB (EAAB, 2021). Furthermore, an FFC, which is to be renewed each year, is issued as evidence of such registration and confirmation that such person is legally entitled to carry out the activities of an estate agent.

2.6. Information ethics challenges in the South African real estate industry

The South African real estate industry is characterised by some firms that do not comply with the code of conduct of the sector. Moreover, there are also illegal and unregistered firms that do not comply with the EAAB code of conduct (EAAB, 2018). It has been reported that after the sale of properties, clients complain about receiving e-mails and calls from firms they did not give contact. Some of the e-mails they receive relate to money laundering which promises the recipients lots of money if they provide their banking details and personal particulars (Mthembu-Salter, 2006). This makes property sellers and buyers vulnerable to criminals, hackers, and fraudsters (Meadon, 2019).

It is reported that some firms in the South African real estate industry have inefficient systems that do not protect clients' information (Jardine, 2015). Thus, these systems expose the privacy of property buyers and sellers. Some firms blame a lack of resources for acquiring protected systems. Others blame the pace at which technology changes (Johnson, 2015). Some firms suspect that the Deeds Office also leaks buyers' and sellers' information (Mthembu-Salter, 2006).

3. RESEARCH METHODOLOGY

This study followed a mixed-method approach. Qualitative and quantitative methods were used to establish and verify the extent of IE enforcement and

the challenges experienced. Property practitioners in the South African real estate industry were the population for this study. In-depth interviews with conveniently sampled managers and employees of property practitioner firms operating in Gauteng province were conducted. The study used experienced managers and employees from property practitioners firms selected, to add depth in the data collection process. This is because when conducting in-depth interviews, one of the objectives is to gather detailed and rich data.

The study conveniently sampled one manager and one employee from each of the five property practitioners firms. Thus, the study sampled two participants from each firm, which amounted to ten in total. The five selected property practitioners firms were located in the Gauteng province of South Africa. This study aimed to use property practitioners firms that are more accessible and available to participate. The firms participated voluntarily and gatekeepers' letters were obtained from these firms. Interviews were audio recorded, transcribed, and interpreted. Content analysis was followed to organise collected data into themes.

A web-based questionnaire designed based on existing literature was used to collect quantitative data from property practitioners firms in South Africa. A reliable database of 3,338 property practitioners firms was used as the sample frame and population of this study. This study followed a census. Thus, all property practitioners firms in the sample frame were selected to participate in this study. The questionnaire was captured in Microsoft Word and later exported to an online platform.

A link to the questionnaire was sent via e-mail to all firms on the database. A total of 60 completed questionnaires were received from the firms yielding a 2% response rate. The results cannot be generalised due to the low response rate. The quantitative data were analysed with the help of a statistician. Descriptive statistics, namely, standard deviation and mean were used to describe the data. Frequencies were used to describe demographical data, the extent of IE enforcement, and challenges. The Cronbach alpha was used to test the data for reliability.

4. QUALITATIVE DATA ANALYSIS

This section analyse the collected data using content analysis and key themes are identified. Where appropriate, the results are presented verbatim. The objectives and the research questions are adequately addressed. The analysis is done to address the objectives of identifying systems and processes used by property practitioners firms to enforce IE and to establish ethical challenges property-practitioner firms come across when enforcing IE.

4.1. Demographical information

As per the sampling, 50% of the participants were at the employees level and 50% were at the managerial level in the property practitioners firms. Regarding the years of working, the results indicate that 50% of the participants have been working in the real estate industry for 6 to 10 years. Other participants worked in the sector for 11 to 15 years (20%), 0 to

5 years (10%), 21 to 25 years (10%), and 26 to 30 years (10%). The results indicate that 4 of these participants had a postgraduate qualification, 4 had a diploma or certificate, 1 had an undergraduate qualification and 1 had a matriculation certificate. These results are in accordance with the sector's desire to have experienced and educated property practitioners (EAAB, 2022).

Regarding years the property practitioners firms have been operational, 40% of the participants indicated that their firms have been operational for 11 to 20 years, 0 to 10 years (30%), 41 to 50 years (20%), and 21 to 30 years (10%). Nine of the participants indicated that their firms have 0 to 100 employees whereas one of the participants was not sure of the number of employees in his/her firm. Regarding the real estate industry segment the firms operate in, the participants indicated that their firms operate in the following segments: residential segment (90%); rental (80%); vacant land (40%); commercial (30%); new development (30%); property broker (10%); property administration (10%); agriculture (10%); and small holding (10%). The results indicate that all these property practitioners firms are registered with the EAAB and have a valid FFC. The results indicate that these firms have passed the survival stage of a business since they have been operating for over ten years. Most businesses fail within four to five years of their existence (Abidin et al., 2020). These results are in accordance with the real estate industry's desire to have registered property practitioners (EAAB, 2021; EAAB, 2022).

4.2. Extent of information ethics enforcement

This study aimed to establish the extent to which property practitioners firms enforce IE. The participants gave the following responses to this question:

Participant A: *"The company is very strict to only keep the information within the company; not to send it to people outside the firm"*.

Participant B: *"The company has an internal Information Technology (IT) system that assists in safeguarding client information"*.

Participant D: *"Physical data that is not being used for future purpose will be destroyed. For example, forms that is not part of the agreement and applications that are declined or withdrawn. Information is destroyed on a weekly basis. Approved applications are recorded in a system and only certain people can have access to this information"*.

Participant E: *"On the first interview with a potential client, the individual has to sign a form to allow the property practitioner firm to access their financial and private information"*.

Participant F: *"IE is handled with the greatest confidential and lockable cabinets for files to secure client information"*.

Participant G: *"Employees in the company have their own passwords for the company systems. Clients' personal information is locked in a cabinet and only certain employees have access to this information"*.

Participant H: *"Company information availability is only limited to people who use or have access to the system. For example, my team members do not have access to my Customer Relation Management (CRM) system"*.

Participant I: *"The employees in the company have their own unique passwords and login details"*.

Participant J: *"All employees receive passwords to protect sensitive company information"*.

The above responses can be summarised in Table 1 below. The results indicate that these firms enforce IE to a certain extent. The results indicate that these firms are putting several measures to enforce IE. While the sector is worried about the incidence of inefficient systems (EAAB, 2019b), these firms are enforcing IE using common measures. According to Hewitt and White (2022), passwords are a common measure to restrict access and protect information systems.

Table 1. The extent of IE enforcement

<i>Participant</i>	<i>The extent of IE enforcement</i>
Participant G	Password-protected systems
Participant I	
Participant J	Destroying paper-based information
Participant D	
Participant H	Restricted access to information
Participant A	Strictly keeping information internally
	Strict sharing rules with external stakeholders
Participant B	Internal IT system that safeguards information
Participant E	Signing informed consent and confidentiality clause
Participant F	The use of lockable cabinets for files to secure client information

4.3. Information ethics enforcement challenges

This study aimed to establish the ethical challenges experienced by property practitioners firms when enforcing IE. The participants stated the following about the challenges they experienced while enforcing IE:

Participant A: *"The main challenges that we as a company usually experience from a day to day is clients being unhappy with the fact that we have their personal information, even though their information is easily accessible, for instance at the Deeds Office"*.

Participant D: *"The biggest problem is that legislation forces you to keep original documentation for up to 7 years, where only recently legislation changed in such a way that it can be electronic copies but there is a massive procedure to implement this process because it has to be South African Revenue Service (SARS) verified before you can continue with that specific process. We as a company are currently looking at implementing this process because storage of the physical documents takes up a lot of storage space but still doing the relevant research regarding this process"*.

Participant G: *"The biggest challenge in the sector currently is cybercrime and we have been hacked before so we have enhanced our systems to ensure there are no cyberattacks in future hence the limitation to client information and only allowing certain employees to have access to this information"*.

The above responses indicate that these firms experience challenges when enforcing IE. Table 2 summarises the challenges as stated by the participants. These results are in accordance with the sector's concern about inefficient information systems, lack of trust from customers, and poor service delivery which negatively affect the reputation of the sector (EAAB, 2019b).

Moreover, the results concur with Plessis (2021) who recorded cybercrime and hacking as a serious concern for businesses in South Africa.

Table 2. IE enforcement challenges

Participant	IE enforcement challenges
Participant A	Client's information easily accessible at the Deeds Office
	Lack of trust from clients
Participant D	Legislation requirement of record keeping
	Lack of physical and electronic storage of information
Participant G	Cybercrime and hacking

5. QUANTITATIVE DATA ANALYSIS

This section discusses the analysis of quantitative data that was collected using a web-based questionnaire. IE enforcement challenges identified through the interviews were incorporated into a questionnaire.

Table 3. Frequency of property practitioners firms per property sub-sector

	Property sub-sector	Frequency	Per cent	Valid per cent	Cumulative per cent
Valid	Commercial property	4	6.7	6.7	6.7
	Residential property	56	93.3	93.3	100.0
	Total	60	100.0	100.0	

5.1.2. Real estate industry segment

This question aimed to establish the real estate industry segment in which property practitioners firms operate. Table 4 indicates the of property practitioners firms per real estate industry segment. The majority (53) of the property practitioners firms in this study are estate agencies. Other property

5.1. Demographical information

Demographical questions aimed to describe the characteristics of the property practitioners firms that participated in the quantitative study.

5.1.1. Property sub-sector

This question aimed to establish the sub-sector in which the property practitioners firms operate. Firms had to choose between commercial property and residential property. The results indicate that the majority (56) of the firms operate in the residential property sub-sector of the South African real estate industry while a few (4) operate in the commercial property sub-sector. According to the EAAB (2021), a large number of real estate firms operate in the residential property sub-sector. Table 3 indicates the frequency of the property sub-sectors.

practitioners firms operate in the following real estate industry segments: property brokers (3); property management, facilities managers (3); and real estate industry general (revenue based) (1). This representation is in line with that of real estate firms registered with the Property Practitioners Regulatory Authority (PPRA), which indicates that the majority of firms are estate agencies (EAAB, 2022).

Table 4. Frequency of property practitioners firms per real estate industry segment

	Real estate industry segment	Frequency	Per cent	Valid per cent	Cumulative per cent
Valid	Estate agencies	53	87.1	87.1	87.1
	Property broker	3	5.0	5.0	93.3
	Property management, facilities managers	3	5.0	5.0	98.3
	Real estate industry general (revenue based)	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

5.1.3. Years of business operation

This question aimed to establish the number of years the property practitioners firms have been in operation. The results indicate that 25 property practitioners firms have been in operation between 11 to 25 years, 15 between 6 to 10 years, 14 for over

25 years, and 6 have been in operation between 1 to 5 years. The results indicate that the majority of these real estate firms have passed the survival stage of a business which is three to five years (Sharp, 2019). Table 5 indicates the frequency of the number of years the firms have been in operation.

Table 5. Frequency of the number of years the firms have been in operation

	Number of years	Frequency	Per cent	Valid per cent	Cumulative per cent
Valid	Between 1 and 5	6	10.0	10.0	10.0
	Between 11 and 25	25	41.7	41.7	51.7
	Between 6 and 10	15	25.0	25.0	76.7
	Over 25	14	23.3	23.3	100.0
	Total	60	100.0	100.0	

5.1.4. Location of firms

This question aimed to establish the province in which the property practitioners firm is located. Table 6 indicates the frequency of the provinces in which the property practitioners firms operate. There are 9 provinces in South Africa, namely,

Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West, and Western Cape. A larger number (29) of property practitioners firms operate in the Gauteng province. Other firms operate in the following provinces: Western Cape (10), KwaZulu-Natal (8), Eastern Cape (5), North West (4), Free State (3), and Limpopo (1).

Table 6. Frequency of provinces in which property practitioners firms operate

	<i>Province</i>	<i>Frequency</i>	<i>Per cent</i>	<i>Valid per cent</i>	<i>Cumulative per cent</i>
Valid	Eastern Cape	5	8.3	8.3	8.3
	Free State	3	5.0	5.0	13.3
	Gauteng	29	48.3	48.3	61.7
	KwaZulu-Natal	8	13.3	13.3	75.0
	Limpopo	1	1.7	1.7	76.7
	North West	4	6.7	6.7	83.3
	Western Cape	10	16.7	16.7	100.0
	Total	60	100.0	100.0	

5.1.5 Number of employees

This question aimed to establish how many employees each property practitioners firm has. A 6-point Likert scale ranging from “Between 1 and 20” to “Over 100” was used to establish the number of employees property practitioners firms have. The results indicate that the majority (49) of

the firms had between 1 and 20 employees. Other firms had between 21 and 40 employees (4), over 100 (3), between 61 and 80 (2), and between 81 and 100 (2). The results indicate that these real estate firms are small and medium-sized enterprises (Masocha, 2019). Table 7 indicates the frequency of the number of employees per property practitioners firm.

Table 7. Frequency of number of employees per property practitioners firm

	<i>Number of employees</i>	<i>Frequency</i>	<i>Per cent</i>	<i>Valid per cent</i>	<i>Cumulative per cent</i>
Valid	Between 1 and 20	49	81.7	81.7	81.7
	Between 21 and 40	4	6.7	6.7	88.3
	Between 61 and 80	2	3.3	3.3	91.7
	Between 81 and 100	2	3.3	3.3	95.0
	Over 100	3	5.0	5.0	100.0
	Total	60	100.0	100.0	

5.2. Data reliability

The Cronbach’s coefficient alpha is used to test internal consistency because it is the most common and widely used method (DeVellis, 2006). The coefficient ranges from between 0 and 1, and a value that is equal to or less than 0.6 indicates unsatisfactory internal consistency reliability (Malhotra, 2004). According to O’Leary-Kelly and Vokurka (1998), coefficients equal to or greater than 0.70 indicate the high reliability of the measuring instrument. The following three criteria for judging Cronbach’s alpha results proposed by DeVellis (2006) are used in this study: reliability is considered good when the Cronbach’s alpha is above 0.8; reliability is considered acceptable when the Cronbach’s alpha is between 0.6 and 0.8; and

reliability is considered unacceptable when the Cronbach’s alpha is below 0.6. Table 4 indicates that all the factors are good and reliable as their Cronbach’s alpha is greater than 0.8. The overall Cronbach’s alpha for this study is 0.895 and therefore very reliable.

5.2.1. Reliability of the extent of information ethics enforcement

The Cronbach’s alpha was used to test the reliability of the data. The Cronbach’s alpha for the extent of IE enforcement was 0.885. Thus, the extent of IE enforcement is good and reliable as it is greater than 0.8. Table 8 indicates the reliability of the extent of IE enforcement.

Table 8. Reliability of the extent of IE enforcement

<i>Item-total statistics</i>				
	<i>Scale mean if the item deleted</i>	<i>Scale variance if the item deleted</i>	<i>Corrected item-total correlation</i>	<i>Cronbach’s alpha if the item deleted</i>
The extent of IE enforcement	116.73	129.521	0.184	0.885

5.2.2. Reliability of information ethics enforcement challenges

The Cronbach’s alpha for the IE enforcement ranges from 0.646 and 0.801. Thus, these IE enforcement

challenges are acceptable and reliable. Table 9 indicates the reliability of the IE enforcement challenges.

Table 9. Reliability of IE enforcement challenges

<i>Item-total statistics</i>				
<i>IE enforcement challenges</i>	<i>Scale mean if the item deleted</i>	<i>Scale variance if the item deleted</i>	<i>Corrected item-total correlation</i>	<i>Cronbach’s alpha if the item deleted</i>
Client’s information easily accessible at the Deeds Office	12.78	10.952	0.216	0.801
Lack of trust from clients	13.32	8.796	0.463	0.735
Legislation requirement of record keeping	12.88	7.698	0.689	0.646
Lack of physical elements/evidence	13.17	8.243	0.648	0.666
Electronic/digital storage of information	13.12	8.105	0.613	0.677

5.3. Descriptive statistics

The standard deviation, mean and frequency are used to describe the extent of IE enforcement and challenges.

5.3.1. Descriptive statistics of the extent of information ethics enforcement

This study aimed to establish the extent to which property practitioners firms enforce IE. A 5-point Likert scale ranging from “Not at all” to “To a great extent” was used to establish the extent of IE enforcement. The standard deviation of 0.910 indicates that there was less spread of responses to this question. Thus, the mean of 4.45 indicates that the majority of the property practitioners firms enforce IE to a greater extent. Forty-two (70%) of the property practitioners firms enforce IE to a greater extent, eleven (18.33%) to a moderate

extent, five (8.33%) to some extent, and two (3.33%) to a small extent. Table 10 indicates the descriptive statistics of the extent of IE enforcement.

Table 10. Descriptive statistics of the extent of IE enforcement

	<i>N</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>Std. Dev.</i>
The extent of IE enforcement	60	2	5	4.45	0.910

5.3.2. Descriptive statistics for information ethics enforcement challenges

This study aimed to establish the challenges experienced by property practitioners firms when enforcing IE. A 5-point Likert scale ranging from “Strongly disagree” to “Strongly agree” was used. Table 11 indicates the descriptive statistics of IE enforcement challenges.

Table 11. Descriptive statistics of IE enforcement challenges

<i>IE enforcement challenges</i>	<i>N</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>Std. Dev.</i>
Client's information easily accessible at the Deeds Office	60	2	5	3.53	0.853
Lack of trust from clients	60	1	5	3.00	1.074
Legislation requirement of record keeping	60	1	5	3.43	1.064
Lack of physical elements/evidence	60	1	5	3.15	0.988
Electronic/digital storage of information	60	1	5	3.20	1.054
Overall score	60	1	5	3.26	1.007

An overall standard deviation of 1.007 indicates that there was less spread of responses to the IE enforcement challenges. Thus, the overall mean of 3.26 indicates that the majority of property

practitioners firms experience these challenges when enforcing IE. Table 12 indicates the frequencies of the level of agreement to IE enforcement challenges.

Table 12. Frequency of IE enforcement challenges

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly agree</i>	<i>Total</i>
Client's information easily accessible at the Deeds Office	0	8	17	28	6	59
Lack of trust from clients	5	16	15	20	3	59
Legislation requirement of record keeping	1	13	14	21	10	59
Lack of physical elements/evidence	1	17	18	18	5	59
Electronic/digital storage of information	3	13	18	19	6	59

6. DISCUSSION

Contrary to reports that indicate that some property practitioners firms are not legally registered with the EAAB (EAAB, 2018), the 5 firms that participated in the qualitative part of this study are registered and have valid FFC. The majority of these firms have been in operation for over 11 years. The majority of the employees of these firms have a diploma or higher qualification.

The quantitative part of this study indicates that the majority of the property practitioners firms are estate agents and operate in the residential property sub-sector. This is in harmony with the EAAB (2021) which reveals that the majority of the property practitioners firms are estate agents. The majority of these firms have been operating in the real estate industry for over 6 years and have between 1 and 20 employees. These firms contribute to job creation in South Africa.

Conflicting with the EAAB (2018) which reports that some property practitioners firms are not compliant with the code of conduct and that they do not have efficient systems that protect

the information of clients and firms in this study enforces IE to a greater extent. They enforce IE through restricted and password-protected information systems, destruction of paper-based information, strict internal and external information dissemination rules, signing of informed consent and confidentiality clauses, and the use of lockable cabinets for files to secure client information. This is in accordance with the Protection of Personal Information Act No. 4 of 2013, which requires information to be protected. The findings also concur with Mwatulilwa (2010) who states that firms should put all necessary resources to protect information. The findings are in harmony with Coldwell and Herbst (2004) who argues that information should be stored securely to prevent unauthorised access.

The qualitative study established the following IE enforcement challenges: clients' information easily accessible at the Deeds Office, lack of trust from clients, legislation requirement of record keeping, lack of physical elements/evidence, and electronic/digital storage of information. Client's information easily accessible at the Deeds Office is one of the reasons the EAAB is establishing

a strategic alliance to ensure efficient working systems (EAAB, 2020). The EAAB is establishing stakeholder engagements to gain the trust of customers (EAAB, 2018). The findings indicate that these property practitioners firms have a problem with the requirements of the Protection of Personal Information Act No. 4 of 2013, as it requires firms to keep records of all transactions. Mathiesen (2004) recommends that firms should keep physical evidence and ensure gates, doors, and lockers are locked.

In this digital and Fourth Industrial Revolution era, many businesses are digitalizing their systems and processes. Digitalization comes with IE challenges. This study established IE in the South African real estate industry. The South African real estate industry has been accused of enabling money laundering through non-compliance to IE. It has also been accused of a lack of strict access to information. Thus, the identification of IE challenges in this study adds to existing identified challenges. The implications of this study are as follows:

- The South African Deeds Office should establish measures of limiting access to only authorized users.
- South African real estate industry firms should invest in information security to eliminate cybercrime and hacking of systems which exposes clients' information to criminals. This will restore the lost trust of clients.
- Property practitioners firms should comply with the Protection of Personal Information Act No. 4 of 2013 and strengthen physical and human security.

The implementation of the above measure will help the property practitioners firms to enforce IE. Consequently, firms will regain the trust of clients through the use of digital systems to transact. Moreover, it helps firms to comply with laws, rules, and regulations. In the current economic conditions in which inflation and interest rates are high, enforcement of IE may help people to consider buying knowing that their information is protected (Businessstech, 2023).

7. CONCLUSION

Although some property practitioners firms in the South African real estate industry have inefficient systems which are unable to combat hacking and cybercrime, firms in this study enforce IE to a great extent (EAAB, 2020). These firms comply with the EAAB code of conduct as they are registered with EAAB and have valid FFC. This is

despite the EAAB having a challenge with some illegal unregistered estate agents who do not have valid FFC and fail the audit (EAAB, 2019a).

These property practitioners firms lack digital storage of information (EAAB, 2017). Thus, they are unable to keep a record of all information as required of them by the Protection of Personal Information Act No. 4 of 2013. They also lack physical evidence of their transaction. This information may be used as a backup in case the electronic information gets damaged, stolen, or lost. While the EAAB started stakeholder engagement aimed at earning customers' trust, these property practitioners firms indicate that customers still do not trust them. Perhaps customers are not aware that their information is easily accessible at the Deeds Office a challenge pointed out by these firms.

With the human resource and the years of experience, these firms have, they should continue to enforce IE to a greater extent and strive to eliminate the identified challenges. They should ensure information systems access is limited to authorised users and usernames and passwords are required to get entry. These firms should explore cheaper ways of acquiring digital storage such as cloud. They should keep physical evidence of information and strengthen physical security. The EAAB should use their strategic alliance with the Deeds Office to ensure information about clients is not easily accessible from deeds systems. Property practitioners firms should participate in stakeholder engagement to gain the trust of customers.

There were fewer studies on IE in the South African real estate industry. The IE enforcement challenges identified in this study add to the existing literature on ethics within the South African real estate industry. Property practitioners may come up with strategies to reduce these challenges. Future studies may attempt to establish how property practitioners firms will deal with these challenges. This study followed a mixed-method approach using self-administered interviews and online questionnaires. The questionnaires were hosted and distributed online yielding a lower response rate of 2%. Future studies should use different methods of distributing the questionnaire to yield a higher response rate. The quantitative study followed a census. Future studies should consider following either probability or non-probability sampling to increase the level of confidence. This study was delimited to the South African real estate industry. Future studies may be conducted in other countries and other sectors.

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