

ABOUT GLOBAL RISK IN FOCUS

Know your risks. Plan strategically.

Risk in Focus provides practical, data-driven research to help internal auditors and their stakeholders assess today's constantly changing risk environment and customize their audit planning.

Using survey results and regional roundtables, Risk in Focus reveals key insights from internal audit leaders worldwide about:

- Current risk levels and audit priorities.
- Risk level changes in the past year.
- Risk drivers per region.
- Leading practices for addressing top risks.

Global Risk in Focus is a collaborative partnership facilitated by the <u>Internal Audit Foundation</u> with generous support from IIA regional bodies, IIA institutes, and corporate sponsors. The Foundation gratefully acknowledges the participation of all IIA regional bodies:

- African Federation of Institutes of Internal Auditors (AFIIA)
- Asian Confederation of Institutes of Internal Auditors (ACIIA)

- European Confederation of Institutes of Internal Auditors (ECIIA)
- Fundación Latinoamericana de Auditores Internos (FLAI)
- Arab Confederation of Institutes of Internal Auditors (ARABCIIA)

Risk in Focus was originally created in 2016 by the European Institutes Research Group (EIRG), which continues to publish the report in Europe through the ECIIA.

Designed as a resource for internal auditors and their stakeholders, Risk in Focus will spark conversations and bring new insights to risks that impact your organization, and the world.

Risk in Focus reports and presentations are available for free at the Risk in Focus Knowledge Center.



Visit the <u>Risk in Focus Knowledge Center</u> to download free reports and summary presentations to share with stakeholders.

RESEARCH PARTICIPATION WORLDWIDE

124 countries/territories

3,544 survey responses

roundtables with 138 participants

in-depth interviews



CONTENTS

4	Executive S	Summary	/ – Africa
---	-------------	---------	------------

- 6 Introduction
- Survey Response Rates
- Africa Risk Trends
- Global Risk Trends
- Hot Topic Climate Change
- 18 Hot Topic Digital Disruption
- Africa Analysis
- Global View
- Appendix A: Climate Change Resources
- Appendix B: Artificial Intelligence Resources
- Acknowledgments
- Internal Audit Foundation Partners
- About The IIA





EXECUTIVE SUMMARY – AFRICA

Social impact and regional challenges

Climate change and digital disruption are expected to be the fastest-growing risks in Africa and worldwide in the next three years, according to the 2025 Risk in Focus survey. None of the other 14 risk areas that were studied are expected to see such dramatic changes.

- Internal auditors say climate change is the eleventh highest risk for Africa this year but is expect it to leap to fourth in three years.
- Survey respondents predict digital disruption (including AI) will be second only to cybersecurity as the greatest risk their organizations face three years from now. Currently it is ranked sixth.

The Africa Risk in Focus 2025 report focuses on how internal auditors in Africa are helping their organizations to prepare and respond to climate change and digital disruption in their organizations. Internal auditors in

Africa emphasized that the social impact of these risks must be recognized and addressed.

Climate change poses some of the most dramatic risks to nations in Africa, where extreme weather can lead to crop failure and famine. In response, internal audit leaders say:

- Sustainability efforts are growing.
- Internal auditors are providing support for regulatory compliance, education, and data quality for sustainability reporting.

AFRICA REPORT SPONSORS



IIA-BotswanaIIA-KenyaIIA-South AfricaIIA-Democratic RepublicIIA-MalawiIIA-Tanzaniaof the CongoIIA-MoroccoIIA-UgandaIIA-GabonIIA-NigeriaIIA-ZambiaIIA-GhanaIIA-RwandaIIA-Zimbabwe



AFRICA RESEARCH PARTICIPATION

- 324 survey responses from CAEs and directors
- 33 countries participating
- 2 roundtables with14 participants
- 3 in-depth interviews



EXECUTIVE SUMMARY – AFRICA

Africa's growing digital transformation has also heightened fraud and cybersecurity risks, with new technology users especially vulnerable to fraud. In response, internal auditors are focused on:

- Improving digital literacy within boards, management, and the general workforce.
- Upskilling internal audit's digital competencies.
- Updating risk assessments.
- Monitoring technology effects on workplace culture and social behaviors.

Enhanced survey analysis

For Africa, the risk levels for cybersecurity and business continuity remain high from last year to this year, staying at the top of the list. Compared to last year, human capital concerns rose slightly to rank third, while financial liquidity and fraud dropped slightly.

New this year for Risk in Focus, the survey data analysis includes comparisons for industry and Africa subregions. Industry analysis for risk levels shows:

- In most industries, cybersecurity, business continuity, and human capital are top concerns.
- While fraud risk is high for several industries, it is relatively low for mining and education.
- Governance/corporate reporting risks were rated higher for public sector, mining/energy/water, and education.

Africa subregion analysis for risk levels shows:

- Areas of highest risk were generally consistent across subregions, with highest ranking for cybersecurity, business continuity, human capital, fraud, and financial liquidity.
- In Southern Africa and Central Africa, risk levels were slightly higher for organizational culture than in other regions.

Risk drivers

Based on discussions with audit leaders around the world, the research project identified six risk drivers for emerging risks worldwide:

Direct influence

- Regulations
- Financial impact
- Business opportunity

Indirect influence

- Politics
- Public opinion
- Social impact

Awareness and understanding of these risk drivers can help internal audit leaders and their stakeholders with short-term and long-term strategic decision-making.

REGIONAL REPORTS

Gain insights from regional Risk in Focus reports for:

- Africa
- Asia Pacific
- Europe
- Latin America
- Middle East
- North America

BOARD BRIEFING

Download the Africa 2025 Board Briefing (a summary of key findings for stakeholders)



theiia.org/RiskInFocus



INTRODUCTION

Risk drivers for emerging risks

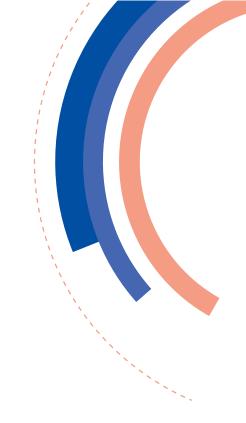
Based on discussions with audit leaders around the world, six risk drivers were identified as key elements that influence how internal audit leaders rank and respond to risks. These were divided into two types – direct pressure and indirect pressure.

The risk drivers that create direct pressure were regulations, financial impact, and business opportunity. These have a strong influence on how the board sets priorities and internal audit scope, particularly in the short term.

Indirect risk drivers – politics, public opinion, and social impact – may take longer to influence risk levels at the organizational level. However, indirect pressure may ultimately lead to direct pressure. For example, political priorities can lead to regulations, while public opinion can turn into market pressure. In addition, social impact can lead

to new priorities for both the public and private sector. The interplay between direct and indirect pressure creates long-term influence on risk levels and audit priority.

During Risk in Focus roundtables and interviews, these risk drivers were evident in how organizations worldwide approach climate change and digital disruption (including AI). Awareness of these risk drivers can help internal audit leaders and their stakeholders with short-term and long-term strategic decision-making.



Risk Drivers for Emerging Risks

Regulations

Specific regulations and consequences for noncompliance

Financial impact

Impact on revenues or assets (including fraud)

Business opportunity

Advantage for business, or risk of falling behind



Politics

Political priorities or trends related to the risk area

Public opinion

Pressure from the public, the market/customers, or stakeholders

Social impact

Harm or benefit for people or society in general



INTRODUCTION

How we do the research

Each year, Risk in Focus research starts with a survey of CAEs and heads of internal audit to identify current and emerging risks for each region. Results are used to identify areas for follow-up roundtables and interviews with CAEs and other industry experts. The survey focuses on 16 risk categories, shown below. Respondents were asked two key questions:

- What are the top 5 risks your organization faces?
- What are the top 5 audit areas on which internal audit spends the most time and effort?

To assess risk trends, respondents were also asked about their expectations for risk levels and audit priorities three years in the future.

The global survey for all regions except Europe was conducted from 21 March 2024 to 20 May 2024 and received 2,559 responses. The survey specifically for Europe was conducted from 4 March 2024 to 1 April 2024 and received 985 responses. Combined, the two surveys received a total of 3,544 responses. Both surveys were conducted online through contacts associated with IIA institutes and regional bodies.

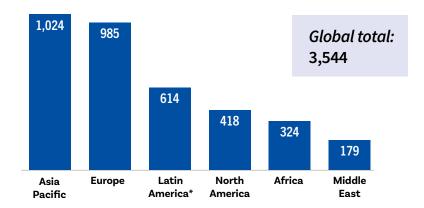
Risk Areas Included in the Report

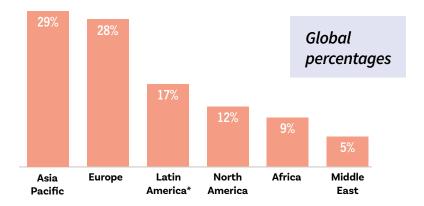
	Risk Name	Risk Description Used in the Survey
1	Business continuity	Business continuity, operational resilience, crisis management, and disaster response
2	Climate change	Climate change, biodiversity, and environmental sustainability
3	Communications/reputation	Communications, reputation, and stakeholder relationships
4	Cybersecurity	Cybersecurity and data security
5	Digital disruption (including AI)	Digital disruption, new technology, and AI (artificial intelligence)
6	Financial liquidity	Financial, liquidity, and insolvency risks
7	Fraud	Fraud, bribery, and the criminal exploitation of disruption
8	Geopolitical uncertainty	Macroeconomic and geopolitical uncertainty
9	Governance/corporate reporting	Organizational governance and corporate reporting
10	Health/safety	Health, safety, and security
11	Human capital	Human capital, diversity, and talent management and retention
12	Market changes/competition	Market changes/competition and customer behavior
13	Mergers/acquisitions	Mergers and acquisitions
14	Organizational culture	Organizational culture
15	Regulatory change	Change in laws and regulations
16	Supply chain (including third parties)	Supply chain, outsourcing, and 'nth' party risk



SURVEY RESPONSE RATES

Global – Response Rate per Region





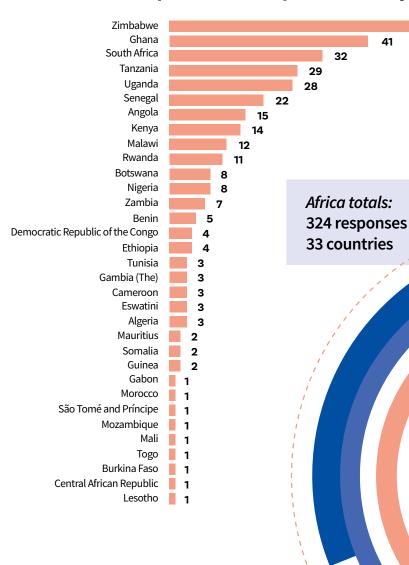
^{*}Caribbean countries that speak English or Dutch are included with North America. (These were Trinidad and Tobago, Jamaica, Bahamas, Barbados.) Caribbean countries that speak Spanish are included with Latin America.

Africa – Response Rate per Country

54

41

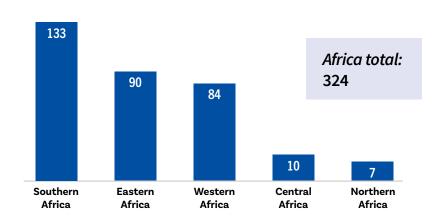
32

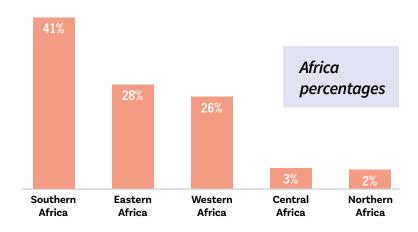




Africa – Demographics

Africa – Survey Responses per Subregion





Africa – Countries per Subregion

133

Southern A	Southern Africa		Eastern Africa			Central Africa	Northern Africa		
Zimbabwe	54	Tanzania	29	Ghana	41	Democratic Republic of the Congo	4	Algeria	3
South Africa	32	Uganda	8	Senegal	22	Cameroon	3	Tunisia	3
Angola	15	Kenya	14	Nigeria	8	Central African Republic	1	Morocco	1
Malawi	12	Rwanda	11	Benin	5	Gabon	1	Total	7
Botswana	8	Ethiopia	4	Gambia (The)	3	São Tomé and Príncipe	1		
Zambia	7	Mauritius	2	Guinea	2	Total	10		
Eswatini	3	Somalia	2	Burkina Faso	1				
Mozambique	1	Total	90	Mali	1				
Lesotho	1			Togo	1				

Note 1: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.

Note 2: Subregions are based the 2017 designations from the Sahel and West Africa Club Secretariat and the OECD. www.oecd.org/swac/maps



Total

Total

Africa – Demographics

Africa - Industry per Subregion

Industry	Southern Africa	Eastern Africa	Western Africa	Central Africa	Northern Africa	All	Total per industry
Financial services	22%	30%	32%	30%	43%	27%	89
Public sector (government)	37%	22%	12%	0%	0%	24%	79
Mining/energy/water supply	5%	12%	15%	20%	0%	10%	32
Education	4%	6%	8%	10%	0%	6%	18
Professional/technical activities	5%	1%	10%	0%	0%	5%	15
Transport/storage	4%	3%	5%	10%	0%	4%	13
Agriculture/forestry/fishing	4%	2%	2%	20%	0%	3%	11
Information/communication	3%	3%	4%	0%	0%	3%	10
Construction	2%	6%	2%	0%	0%	3%	10
Manufacturing	2%	2%	2%	10%	29%	3%	9
Health/social work	4%	2%	0%	0%	14%	2%	8
Other	2%	3%	4%	0%	0%	2%	8
Accommodation/food services	4%	2%	1%	0%	0%	2%	8
Charities	2%	1%	0%	0%	14%	1%	4
Administrative/support services	2%	0%	1%	0%	0%	1%	4
Wholesale/retail	2%	2%	0%	0%	0%	1%	4
Arts/entertainment	0%	1%	1%	0%	0%	1%	2
Total per subregion	133	90	84	10	7	100%	324

Africa – Internal Audit Function Size per Subregion

Function size	Southern Africa	Eastern Africa	Western Africa	Central Africa	Northern Africa	All	Total per size group
1 to 5	50%	45%	44%	30%	43%	46%	149
6 to 10	21%	30%	24%	20%	14%	24%	78
11 to 15	11%	8%	11%	10%	14%	10%	32
16 to 25	3%	8%	7%	10%	14%	6%	19
26 to 50	7%	6%	5%	20%	0%	6%	20
51+	9%	3%	10%	10%	14%	8%	25
Total per subregion	133	89	84	10	7	100%	323



3 largest industries per subregion

If there is a tie for third, all of the tied percentages are highlighted.

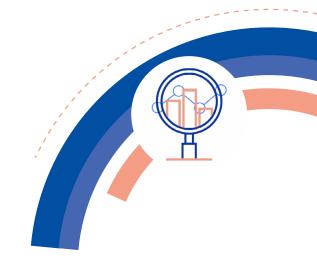
Note: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.

AFRICA – RISK TRENDS

Digital disruption and climate change have risen in rank from last year to this year. In the next three years, digital disruption is expected to increase 21 percentage points to rank second. At the same time, climate change is expected to increase 18 percentage points to be ranked fourth in three years. The risk levels for cybersecurity and business continuity remain high from last year to this year, staying at the top of the list. Compared to last year, human capital concerns rose slightly to rank third, while financial liquidity and fraud dropped slightly.



Survey questions: What are the top 5 risks your organization currently faces? What do you think the top 5 risks will be 3 years in the future?



	Last Year's Risk				Current Year's Risk			Risk Expectations in 3 Years				
1.	Cybersecurity	58%		1.	Cybersecurity	64%		1.	Cybersecurity	63%		
2.	Business continuity	52%		2.	Business continuity	57%		2.	Digital disruption (including AI)	55%		
3.	Financial liquidity	47%		3.	Human capital	44%		3.	Business continuity	54%		
4.	Fraud	46%		4.	Financial liquidity	42%	1	4.	Climate change/environment	43%		
5.	Human capital	39%		5.	Fraud	42%		5.	Human capital	36%		
6.	Governance/corporate reporting	36%	7	6.	Digital disruption (including AI)	34%		6.	Fraud	34%		
7.	Organizational culture	34%		7.	Organizational culture	34%		7.	Regulatory change	32%		
8.	Digital disruption (including AI)	33%		8.	Regulatory change	32%		8.	Financial liquidity	32%		
9.	Regulatory change	32%		9.	Governance/corporate reporting	31%		9.	Governance/corporate reporting	28%		
10.	Communications/reputation	27%		10.	Communications/reputation	26%		10.	Geopolitical uncertainty	25%		
11.	Geopolitical uncertainty	25%		11.	Climate change/environment	25%		11.	Organizational culture	23%		
12.	Market changes/competition	21%		12.	Geopolitical uncertainty	23%		12.	Supply chain (including third parties)	21%		
13.	Climate change/environment	19%		13.	Supply chain (including third parties)	16%		13.	Market changes/competition	20%		
14.	Supply chain (including third parties)	19%		14.	Market changes/competition	15%		14.	Communications/reputation	17%		
15.	Health/safety	10%		15.	Health/safety	10%		15.	Health/safety	11%		
16.	Mergers/acquisitions	3%		16.	Mergers/acquisitions	4%		16.	Mergers/acquisitions	6%		

Note: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.



GLOBAL – RISK TRENDS

Digital disruption and climate change risk levels increased from last year to this year. Cybersecurity, business continuity, and human capital risks remain high. Looking to the future at the global level, digital disruption is expected to increase 20 percentage points to rank second in three years. At the same time, climate change is expected to increase 16 percentage points to be ranked fifth in three years.



Survey questions: What are the top 5 risks your organization currently faces? What do you think the top 5 risks will be 3 years in the future?

	Last Year's Risk		Current Year's Risk		Risk Expectations in 3 Years				
1.	Cybersecurity	73%		1.	Cybersecurity	73%	1.	Cybersecurity	69%
2.	Human capital	51%		2.	Business continuity	51%	2.	Digital disruption (including AI)	59%
3.	Business continuity	47%		3.	Human capital	49%	3.	Business continuity	47%
4.	Regulatory change	39%		4.	Digital disruption (including AI)	39%	4.	Human capital	42%
5.	Digital disruption (including AI)	34%		5.	Regulatory change	38%	5.	Climate change/environment	39%
6.	Financial liquidity	32%		6.	Market changes/competition	32%	6.	Regulatory change	37%
7.	Market changes/competition	32%		7.	Financial liquidity	31%	7.	Geopolitical uncertainty	31%
8.	Geopolitical uncertainty	30%		8.	Geopolitical uncertainty	30%	8.	Market changes/competition	30%
9.	Governance/corporate reporting	27%		9.	Governance/corporate reporting	25%	9.	Financial liquidity	25%
10.	Supply chain (including third parties)	26%		10.	Organizational culture	24%	10.	Supply chain (including third parties)	24%
11.	Organizational culture	26%		11.	Fraud	24%	11.	Governance/corporate reporting	22%
12.	Fraud	24%		12.	Supply chain (including third parties)	23%	12.	Fraud	21%
13.	Communications/reputation	21%		13.	Climate change/environment	23%	13.	Organizational culture	20%
14.	Climate change/environment	19%		14.	Communications/reputation	20%	14.	Communications/reputation	15%
15.	Health/safety	11%		15.	Health/safety	11%	15.	Health/safety	10%
16.	Mergers/acquisitions	6%		16.	Mergers/acquisitions	6%	16.	Mergers/acquisitions	9%



Note 1: The global average is calculated by summing the averages from each region and dividing by the number of regions.

Note 2: Risk in Focus surveys conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation and the European Institutes Research Group. n = 3,544.

HOT TOPIC - CLIMATE CHANGE

Extreme weather and regulatory pressure

Climate change poses some of the most dramatic risks to nations in Africa, with shocks from extreme weather already seen in floods, excessive heat, and droughts.

Extreme weather events

According to one estimate, more than 15,000 people died and another 34 million were affected by extreme weather in 2023 in Africa. In response, internal audit leaders report widespread sustainability efforts within their organizations, and they are providing support for regulatory compliance, education, and data quality.

Awareness of the potential impacts of extreme weather events and natural disasters on operations and finance is critical for organizations, said participants at the Risk in Focus roundtable on climate change in Africa. This should include disaster preparedness as well as business continuity and disaster recovery planning. Internal audit can play a major role in advising on the development of such plans and providing assurance on testing and execution.

Internal audit leaders noted that extreme weather events have secondary impacts, as well, that affect other risk areas. For example, natural disasters can contribute to food and water scarcity, and disease outbreaks. Damage to infrastructure can impact supply chain and productivity. Both impact workforce safety, morale, productivity, and efficiency.

"Those are significant instances that are very disastrous and that are destroying infrastructure," said Ruth Doreen Mutebe, head of internal audit at Umeme Ltd, and chair of the African Federation of Institutes of Internal Auditing. "It is taking lives of people. It is pushing people into refugee camps. It is building up many of the displacement camps, and literally people are basically depending on aid to be able to carry on."

Climate Change Africa Survey Results 25% Say it is a top 5 risk now 43% Expect it to be a top 5 risk in 3 years



1. Dunne, Daisy, October 2023, "Analysis: Africa's extreme weather has killed at least 15,000 in 2023," Carbon Brief, CarbonBrief.org, United Kingdom.

This points to the need for an informed and broad approach. Climate change risk means tangible and dangerous conditions for people, Mutebe said. "When I compare that to these other very regulatory-driven considerations, I think that takes precedence for the case of Africa."

Disaster planning

With extreme weather comes large-scale impacts that push the limits of disaster recovery and business continuity. Effective disaster planning begins with having leaders who understand the full scope of climate change risk. Internal audit should position itself through education and upskilling to provide boards with a cleareyed view. This includes building strong relationships with risk managers within the organization and seeking out experts who can provide additional support.

"We don't have the luxury of waiting until we turn into experts," Mutebe said. "So, it will be a combination of us learning more about climate change, but also collaborating with the experts."

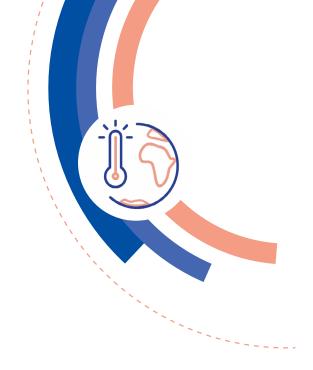
James Gourrah, CAE and audit manager of Capitec Bank, agrees. "We need to be the eyes and ears, but also the conscience saying, 'As you navigate your goals and your objectives over the next three years, don't forget about these pertinent things'. And so, we need to educate very much so as opposed to only coming in when something happens."

Part of internal audit's approach must be to look at risk areas with a strategic, business mindset, Mutebe said. "What are the real implications of climate change? What does it mean to an organization? How is it impacting business?"

Gourrah takes it a step further, suggesting internal audit can help organizations anticipate and plan for risks before they materialize.

"We've got a role to play when crises happen, but I think the biggest value-add we can have for organizations is to be change agents and to transform ahead of things going wrong."

"It is taking lives of people.
It is pushing people
into refugee camps. It is
building up many of the
displacement camps, and
literally people are basically
depending on aid to be able
to carry on."





Beyond current events

Sustainability efforts, both voluntary and mandated, are growing priorities for organizations and internal auditors in Africa. Sustainability focuses on understanding, managing, and balancing an organization's long-term impacts on climate, people, and community in conjunction with its long-term growth and financial stability. For Africa, those long-term implications must include considerations on preserving natural resources, said Eric Yankah, country manager for ENERTRAG Ghana Ltd.

"Generally speaking, the impact on weather, the impact on our resources, the impact on agriculture, the drying up of our skies, the industrial carbon emissions are what drive my concerns," he said. "If internal auditors are to be involved in climate change issues, then they have to be advising their institutions on how to better manage issues, like CO2 emissions, nitrogen emissions, pollution effluent, and pollution control."

This advisory role must include examining how internal audit operates within the organization and taking on a mindset of understanding the broader impacts. Mutebe said this requires internal audit to ask, "How does the change in climate literally affect the operations of my business? How do we become useful? How do we check the processes? How do we check strategic thinking? How do we check the innovations that are happening within the business? So that we can elevate the impact of the profession".

She added a warning that failing to step into this role could leave internal audit on the outside looking in. "If we do not do that, then we will have our counterparts — management teams, stakeholders — discussing and delving into the details of these discussions, but we will not be there."



Global – Climate Change as a Top 5 Risk Level per Region

Survey question: What are the top 5 risks your organization currently faces? What do you think the top 5 risks will be 3 years in the future? Topic: Climate change/environment



Note 1: The United States and Canada are shown separately because of significant differences in their responses. *Note 2:* Risk in Focus surveys conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation and the European Institutes Research Group. *n* = 3,544.







Risk in Focus Roundtable Insights

Audit

- Understand the social impact caused by extreme weather and climate change.
- Provide assurance on regulatory compliance and data quality used for reporting.
- Help prepare for disaster recovery and crisis management.
- Upskill internal audit staff on controls and regulations related to sustainability and climate risks.

Advisory

- Seek collaboration across the organization for sustainability strategies, data collection, and reporting.
- Build awareness in the organization about direct and secondary risks associated with extreme weather events.
- Provide insights to the organization about short- and long-term impacts of extreme weather.

Board Considerations

- Educate the board about sustainability and climate-related risks.
- Inform the board about the organization's actions related to sustainability goals.
- Inform the board about risks associated with sustainability activities (financial, regulatory, operational, reputational).

For auditing resources, see Appendix A: Climate Change Resources



HOT TOPIC - DIGITAL DISRUPTION

Fraud and cyber vulnerabilities

Internal audit leaders in Africa say fraud and cybersecurity risks are rising quickly with the continent's growing digital transformation.

Top priorities for internal auditors are to improve digital literacy within boards, management, and the general workforce; update risk assessments; and upskill internal audit's digital competencies. Internal auditors have also noted the effects of digital transformation on workplace culture and social behaviors.

Progress comes with challenges

Digital disruption continues its inevitable march across the African landscape, influencing all aspects of life for its residents. The wide diversity of digital maturity among Africa's 54 sovereign nations makes it difficult to describe the state of digital disruption on the continent simply. Some areas have embraced digital advancement aggressively, as seen in the expanded access to mobile

technology and the related growth in e-commerce and digital banking. Other areas are held back by limited access to reliable electrical service and internet access.

According to a recent report from the World Bank, 86% of African firms have access to at least basic digital enablers (mobile phone, computer, or internet) with more than half (52%) having access to advanced enablers (computers with internet connections). However, the same survey found a scant 11% have advanced use of digital technology in business functions, defined as having integrated systems or specialized software designed to perform specific functions.²

In addition, the cost of technology and machinery in Sub-Saharan Africa is 35 to 39 percent more expensive in absolute terms than in the United States, according to a World Bank report.³

Digital DisruptionAfrica Survey Results

34% Say it is a top 5 risk now 55% Expect it to be a top 5 risk in 3 years



2. Cruz, Marcio, ed. 2024. "Digital Opportunities in African Businesses." Overview booklet. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO 3. Ibid.



Building digital literacy

The growth of internet access in many regions has helped launch extensive online services in public and private sectors, including digital banking, e-commerce, and online courses. Nonetheless, adoption of supporting controls has lagged, resulting in elevated cybersecurity and fraud risks.

"Professional systems are generally vulnerable for lack of user understanding, and therefore they are vulnerable to various forms of disruptions," Yankah said. "The biggest set of disruptions in professional systems is in email. Malware on websites, viruses in data transfer, lack of caution with the use of media. There's not enough depth in policy and practice in relation to the use of IT services and infrastructure."

This situation has led to greater focus on fraud prevention and building digital literacy across organizations, from the boardroom to the breakroom. Cybersecurity ranked second and fraud ranked fifth in terms of internal audit effort, based on responses from Africa for the Risk in Focus survey.

Mutebe agreed that digital literacy is not keeping pace with technology implementation in Africa.

"Because of the diversity in the speed of adaptation [to new technology], you see fraud cases coming up," she said. "That's where you see people being conned. And a fraud that is technology-driven can be really significant and disastrous."

Internal auditors also need to increase digital literacy within their functions, according to Yankah and others. "Not every internal auditor, particularly those who are not youthful, are adept in the use of technology and for that matter, in the general information technology space now."

"Professional systems are generally vulnerable for lack of user understanding, and therefore they are vulnerable to various forms of disruptions."





The unknowns of Al

This year's Risk in Focus survey incorporated artificial intelligence (AI) into the digital disruption risk category, acknowledging the meteoric adoption of generative AI tools globally since their introduction less than two years ago.

Al is not yet widely used in Africa, and there are many unknowns that are yet to play out, including how Al can be used for internal audit. Yankah said those unknowns are fueling concern about Al replacing internal auditors. He likened the concern to the introduction of computers in business. "Al will probably make us more efficient, but we have to know how to utilize Al in order to gain the efficiency that we are looking for," he said.

Internal audit should have a clear understanding of any AI use within the organization and educate boards and executive management about the need for proper controls and processes over AI use. Yankah noted, "If we are not prepared for the AI revolution, then obviously we'll be walked over, and soon AI will cease to become the harnessed dog, but rather become the wild lion in our communities."

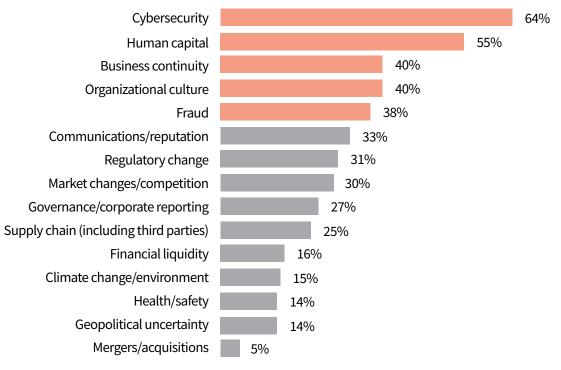
Another concern for developing regions is the challenge of "chasing technology," Yankah said. The inexorable march of technological advancement makes keeping pace challenging enough. For regions that are already behind, catching up technologically may be close to impossible.

The top risk areas where AI could have a negative impact in Africa, according to survey respondents, are cybersecurity, human capital, business continuity, organizational culture, and fraud. (See the graph on next page.)



Africa – Highest Risk Levels Related to Al

Survey question: What are the top 5 areas where artificial intelligence has the most negative impact?



Note: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.





A seat at the technology table

Internal audit leaders should embrace digital disruption within their audit functions, according to Risk in Focus interviewees. That new knowledge can be used to educate and advise boards and executive management on technology issues, as well as build up their teams to provide relevant assurance.

"The future is one that calls for us to be multidisciplinary in terms of skill," Mutebe said. "As internal auditors, we need to build that mind and we need to be open to learning new things and how they impact the world and how they impact society, not only how they impact controls, not only how they impact processes within the organization, or how they are impacting finance. We have to be all-round thinking people, and we have to train our minds to think that way if we are going to elevate impact in society."

Educating boards

African boards are aware of the growing influence of technology on operations and have responded to some extent. However, digital literacy remains weak, according to roundtable participants. While some

organizations have created new board oversight committees focused on technology and AI, members generally are not technology savvy. This can lead to gaps in understanding how technology impacts operations, strategy, workplace culture, and more.

Boards are looking to internal audit for assurance on proper controls over new technology and AI, which makes upskilling and education of internal audit in these areas even more urgent. Gourrah urged his colleagues to go one step further and push technology's adoption.

"On the technology side, whether it's the adoption of artificial intelligence or adoption of other technologies, our role is to be the advisors so that the organization understands you need to get on a transformational journey, you need to start adopting," Gourrah said, adding this also helps provide value to the organization. "We are uniquely placed to be able to play that advisory role before, rather than provide comfort afterwards, that your controls and your risk management have worked."

Internal audit leaders should embrace the educator role and help their organizations build digital awareness and literacy on boards, as well as in the C-suite and the rest of the organization.





Impact on culture

Internal audit leaders in Africa are aware of digital disruption's broad impact on business, operations, and risk management. Some also expressed growing concern about its impact on culture — both the need for changes in workplace culture to protect against digital disruption and the influence of digital technology on Africa's culture overall.

Roundtable participants noted that while assurance over information technology and cybersecurity (ITC) has become more common, similar oversight should be applied to technology's influence on organizational culture. Indeed, impacts on various workplace processes and weak or non-existent controls require a change in mindset at work. "We need to take a step back and see what else we can do to assess the impact of digital disruption on the organization," urged one roundtable participant.

Beyond workplace culture, digital disruption is having a profound impact on the personal lives of a growing number of Africa's 1.5 billion people, according to Mutebe. She describes Africa's social culture as "relationship-centric," driven by familial and community ties. She worries that digital disruption, particularly the expanding use of social media, could fray those ties, but she sees signs that people are learning to adapt.

"[Social media] disrupts the social setting, the social beliefs, the values, the cultures, but we will get used to it," she said. "And I know of late, people are being very intentional to balance out use of technology and not killing the social norms or the values of the people in Africa."

Mutebe added that the potential for social disruption is greater among Africa's youth. "You realize that the biggest percentage of the population in Africa is the young people, and young people adapt very, very quickly to technology. It's not surprising that if something comes up, you will find it is manifesting itself quickly within the universities, within colleges, and then within the young working group and the under 25. And once it gets there, it spreads quickly, like wildfire."

"[Social media] disrupts the social setting, the social beliefs, the values, the cultures, but we will get used to it."





Audit

- Examine current technology use and controls, with special attention to cybersecurity and fraud prevention.
- Build digital literacy in the internal audit function.
- Be proactive about understanding Al's potential use for internal audit and the organization.
- Provide assurance over policies related to information technology, cybersecurity, and artificial intelligence.

Advisory

- Seek a seat at the table in discussions about new technology.
- Help build digital literacy throughout the organization.
- Support development of appropriate controls for new technology and use of AI.



Board Considerations

- Educate the board on relevant technology risks.
- Provide assurance for technology use at the organization.

For auditing resources, see Appendix B: Artificial Intelligence Resources



AFRICA ANALYSIS

Comparing risk and priority

In the survey, respondents were asked two key questions:

- What are the top 5 risks your organization faces?
- What are the top 5 audit areas on which internal audit spends the most time and effort?

This graph shows gaps between risk levels and audit priorities.

Blue text shows where audit priority is <u>relatively high</u> compared to risk levels:

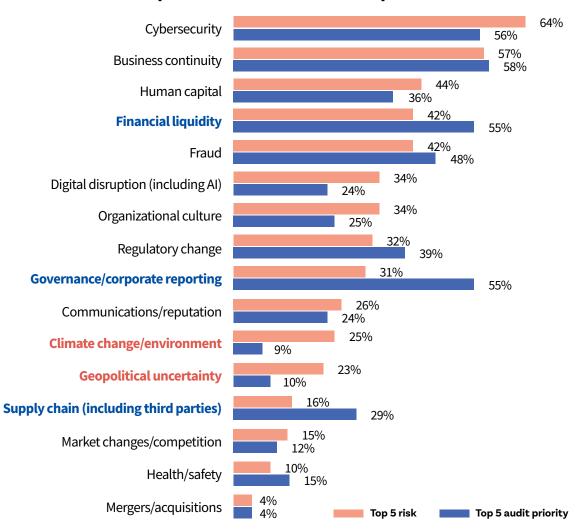
- Financial liquidity (+13)
- Governance/corporate reporting (+24)
- Supply chain (including third parties) (+13)

Orange text shows where audit priority is <u>relatively low</u> compared to risk levels:

- Climate change (-16)
- Geopolitical uncertainty (-13)

It should be noted that internal audit priority is contingent on how much action can be taken related to the risk within the organization. For example, climate change may be a top 5 risk but not a top 5 audit priority at an organization if there are relatively few actions internal auditors can take related to climate change. In addition, internal audit effort related to climate change could be included in business continuity, regulatory change, or health/safety.

Africa – Top 5 Risk Levels vs. Top 5 Audit Priorities



Note 1: Top 5 audit priority is <u>not</u> a measure of whether the risk is on the audit plan. Top 5 audit priority indicates whether the risk was chosen as one of the 5 highest areas for audit time and effort.

Note 2: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.



Africa - Risk levels

In most industries, cybersecurity, business continuity, and human capital are top concerns. While fraud risk is high for several industries, it is relatively low for mining and education. Governance/corporate reporting risks were rated higher for public sector, mining/energy/water, and education.

Africa – Top 5 Risk Levels per Industry

Survey question: What are the top 5 risks your organization currently faces?

Risk area	All	Financial services	Public sector	Mining/ energy/ water	Education	Professional/ technical
Cybersecurity	64%	85%	53%	59%	56%	80%
Business continuity	57%	61%	46%	56%	61%	73%
Human capital	44%	47%	32%	47%	67%	47%
Fraud	42%	45%	42%	28%	39%	47%
Financial liquidity	42%	42%	33%	69%	33%	40%
Digital disruption (including AI)	34%	43%	34%	16%	39%	40%
Organizational culture	34%	27%	43%	28%	67%	27%
Regulatory change	32%	39%	39%	28%	11%	13%
Governance/corporate reporting	31%	26%	41%	38%	44%	13%
Communications/reputation	26%	20%	32%	31%	28%	33%
Climate change/environment	25%	16%	34%	34%	11%	20%
Geopolitical uncertainty	23%	20%	24%	16%	11%	27%
Supply chain (including third parties)	16%	8%	25%	16%	17%	7%
Market changes/competition	15%	13%	8%	6%	11%	27%
Health/safety	10%	4%	6%	25%	6%	7%
Mergers/acquisitions	4%	3%	9%	3%	0%	0%

5 highest risk areas per industry

If there is a tie for the fifth highest percentage, both percentages are highlighted in a lighter color.

Note 1: Some industries are not included because the response rate was too low for analysis.

Note 2: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.



Africa - Risk levels

Areas of highest risk were generally consistent across subregions, with highest ranking for cybersecurity, business continuity, human capital, fraud, and financial liquidity. In Southern Africa, risk levels were slightly higher for organizational culture than in other regions.

Africa – Top 5 Risk Levels per Subregion

Survey question: What are the top 5 risks your organization currently faces?

Risk area	All	Southern Africa	Eastern Africa	Western Africa	Central Africa
Cybersecurity	64%	57%	72%	64%	60%
Business continuity	57%	56%	52%	68%	30%
Human capital	44%	39%	47%	48%	60%
Financial liquidity	42%	41%	39%	44%	50%
Fraud	42%	44%	47%	35%	40%
Digital disruption (including AI)	34%	26%	50%	32%	20%
Organizational culture	34%	40%	36%	24%	30%
Regulatory change	32%	40%	22%	29%	40%
Governance/corporate reporting	31%	33%	26%	36%	40%
Communications/reputation	26%	25%	23%	30%	40%
Climate change/environment	25%	25%	36%	15%	0%
Geopolitical uncertainty	23%	23%	18%	29%	20%
Supply chain (including third parties)	16%	22%	12%	12%	20%
Market changes/competition	15%	17%	8%	20%	20%
Health/safety	10%	8%	8%	13%	30%
Mergers/acquisitions	4%	5%	6%	2%	0%

5 highest risk areas per industry

If there is a tie for the fifth highest percentage, the tying percentages are highlighted.

Note 1: Northern Africa is not included in the graph because the response rate was not high enough for analysis.

Note 2: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.



Africa – Audit priorities

This graph shows the percentage of respondents who indicated an audit area was one of the 5 priorities where they spend the most internal audit time and effort. Across all industries in Africa, internal audit priority is high for business continuity, financial liquidity, and governance/corporate reporting. For education, cybersecurity priority is relatively low but human capital priority is higher.

Africa – Top 5 Audit Priorities per Industry

Survey question: What are the top 5 audit areas on which internal audit spends the most time and effort?

Risk area	All	Financial services	Public sector	Mining/ energy/ water	Education	Professional/ technical
Business continuity	58%	65%	42%	56%	56%	60%
Cybersecurity	56%	76%	54%	56%	33%	53%
Financial liquidity	55%	56%	42%	69%	56%	53%
Governance/corporate reporting	55%	51%	59%	59%	56%	53%
Fraud	48%	46%	43%	50%	44%	67%
Regulatory change	39%	52%	35%	34%	50%	27%
Human capital	36%	34%	33%	34%	56%	60%
Supply chain (including third parties)	29%	18%	42%	34%	28%	27%
Organizational culture	25%	21%	28%	22%	39%	20%
Communications/reputation	24%	26%	22%	34%	28%	27%
Digital disruption (including AI)	24%	24%	25%	9%	22%	33%
Health/safety	15%	4%	23%	25%	17%	0%
Market changes/competition	12%	15%	10%	6%	6%	13%
Geopolitical uncertainty	10%	7%	19%	0%	6%	0%
Climate change/environment	9%	4%	18%	6%	0%	7%
Mergers/acquisitions	4%	1%	5%	3%	6%	0%

5 highest audit priority areas per industry

If there is a tie for the fifth highest percentage, the tied percentages are highlighted in a lighter color.

Note 1: Some industries are not included because the response rate was too low for analysis.

Note 2: Top 5 audit priority is not a measure of whether the risk is on the audit plan. Top 5 audit priority indicates whether the risk was chosen as one of the 5 highest areas for audit time and effort.

Note 3: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.



Africa – Audit priorities

This graph shows the percentage of respondents who indicated an audit area was one of the 5 priorities where they spend the most internal audit time and effort. Results overall show that audit priority was generally consistent across all subregions.

Africa – Top 5 Audit Priorities per Subregion

Survey question: What are the top 5 audit areas on which internal audit spends the most time and effort?

Audit area	All	Southern Africa	Eastern Africa	Western Africa	Central Africa
Business continuity	58%	60%	62%	51%	60%
Cybersecurity	56%	50%	63%	60%	50%
Financial liquidity	55%	56%	47%	61%	70%
Governance/corporate reporting	55%	50%	58%	60%	60%
Fraud	48%	48%	49%	46%	60%
Regulatory change	39%	42%	32%	43%	20%
Human capital	36%	35%	36%	42%	30%
Supply chain (including third parties)	29%	38%	20%	21%	60%
Organizational culture	25%	27%	26%	24%	0%
Communications/reputation	24%	23%	29%	24%	20%
Digital disruption (including AI)	24%	21%	31%	21%	20%
Health/safety	15%	19%	9%	14%	10%
Market changes/competition	12%	10%	12%	14%	20%
Geopolitical uncertainty	10%	11%	9%	10%	10%
Climate change/environment	9%	8%	14%	6%	0%
Mergers/acquisitions	4%	4%	3%	4%	10%

5 highest audit priority areas per subregion

Note 1: Top 5 audit priority is <u>not</u> a measure of whether the risk is on the audit plan. Top 5 audit priority indicates whether the risk was chosen as one of the 5 highest areas for audit time and effort. Note 2: Risk in Focus survey conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation. n = 324 for Africa.



GLOBAL VIEW

Global - Risk levels per region

Worldwide, there is general consensus that risks are high for cybersecurity, business continuity, human capital, and digital disruption (including AI). However, each region also has some unique areas of concern: Africa – financial liquidity and fraud; Asia Pacific – market changes/competition; Europe – geopolitical uncertainty and regulatory change; Latin America – geopolitical uncertainty and regulatory change; Middle East – governance/corporate reporting; North America – regulatory change and market changes/competition.

Global – Top 5 Risk Levels per Region

Survey question: What are the top 5 risks your organization currently faces?

Risk area	Global Average	Africa	Asia Pacific	Europe	Latin America	Middle East	North America
Cybersecurity	73%	64%	64%	83%	74%	66%	88%
Business continuity	51 %	57%	62%	32%	49%	63%	41%
Human capital	49%	44%	57%	52%	47%	43%	54%
Digital disruption (including AI)	39%	34%	36%	40%	37%	38%	48%
Regulatory change	38%	32%	32%	46%	45%	27%	47%
Market changes/competition	32%	15%	49%	32%	26%	29%	41%
Financial liquidity	31%	42%	19%	27%	33%	38%	28%
Geopolitical uncertainty	30%	23%	30%	39%	37%	27%	26%
Governance/corporate reporting	25%	31%	22%	20%	18%	41%	16%
Organizational culture	24%	34%	23%	21%	28%	21%	21%
Fraud	24%	42%	22%	14%	32%	27%	9%
Supply chain (including third parties)	23%	16%	24%	29%	17%	26%	29%
Climate change/environment	23%	25%	26%	33%	29%	12%	12%
Communications/reputation	20%	26%	21%	14%	17%	21%	20%
Health/safety	11%	10%	11%	12%	9%	12%	13%
Mergers/acquisitions	6%	4%	4%	8%	4%	8%	8%

5 highest risk areas per industry

If there is a tie for the fifth highest percentage, both percentages are highlighted in a lighter color.

Note 1: The global average is calculated by summing the averages from each region and dividing by the number of regions.

Note 2: Risk in Focus surveys conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation and the European Institutes Research Group. n = 3,544.



Global - Audit priority per region

Worldwide, there is broad consensus about the areas where internal audit spends the most time and effort, with cybersecurity being the highest overall (pushed higher by Europe and North America). However, each region had one audit area where priority was relatively low, compared to the other regions. These were:

Africa - regulatory change; Asia Pacific - financial liquidity; Latin America - governance/corporate reporting; Europe - fraud; Middle East - regulatory change;

North America - fraud.

Global - Top 5 Audit Priorities per Region

Survey question: What are the top 5 audit areas on which internal audit spends the most time and effort?

Audit area	Global Average	Africa	Asia Pacific	Latin America	Europe	Middle East	North America
Cybersecurity	69%	56%	63%	67%	74%	65%	87%
Governance/corporate reporting	56%	55%	55%	46%	64%	59%	58%
Business continuity	55%	58%	60%	49%	47%	60%	53%
Regulatory change	46%	39%	52%	47%	51%	35%	54%
Financial liquidity	45%	55%	30%	49%	40%	50%	46%
Fraud	41%	48%	43%	52%	36%	40%	29%
Supply chain (including third parties)	31%	29%	28%	29%	36%	31%	35%
Human capital	31%	36%	33%	29%	28%	35%	27%
Digital disruption (including AI)	25%	24%	23%	19%	23%	31%	33%
Organizational culture	23%	25%	25%	30%	24%	22%	15%
Communications/reputation	20%	24%	23%	22%	14%	18%	17%
Market changes/competition	16%	12%	25%	17%	13%	18%	10%
Health/safety	16%	15%	16%	13%	18%	17%	16%
Climate change/environment	12%	9%	16%	11%	20%	5%	9%
Geopolitical uncertainty	8%	10%	6%	12%	6%	9%	3%
Mergers/acquisitions	6%	4%	2%	7%	7%	7%	10%

5 highest audit priorities per region

Note 1: Top 5 audit priority is not a measure of whether the risk is on the audit plan. Top 5 audit priority indicates whether the risk was chosen as one of the 5 highest areas for audit time and effort.

Note 2: The global average is calculated by summing the averages from each region and dividing by the number of regions.

Note 3: Risk in Focus surveys conducted online from 21 March 2024 to 20 May 2024 by the Internal Audit Foundation and the European Institutes Research Group. n = 3,544.



APPENDIX A: CLIMATE CHANGE RESOURCES

Regulations, standards, and frameworks

- COSO (Committee of Sponsoring Organizations of the Treadway Commission): Achieving Effective Internal Control over Sustainability Reporting (ICSR). Supplemental guidance for sustainability reporting based on the globally recognized COSO Internal Control-Integrated Framework (ICIF). https://www.coso.org/new-icsr
- EU (European Union): Corporate Sustainability Due Diligence Directive. https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en
- EU (European Union): Corporate Sustainability Reporting Directive. https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting/corporate-sustainability-reporting-en
- EU (European Union): Regulation on Deforestation-free products. EU rules to guarantee the products EU citizens consume do not contribute to deforestation or forest degradation worldwide. On 29 June 2023, the Regulation on deforestation-free products entered into force. https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products en
- GRI (Global Reporting Initiative). GRI Standards provide a framework for creating standalone sustainability or non-financial reports, or integrated ESG reports (multiple languages available). https://www.globalreporting.org/standards/download-the-standards/
- IFRS (International Financial Reporting Standards): IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information. https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/sustainability-pdf-collection
- IFRS (International Financial Reporting Standards): IFRS S2: Climate-related Disclosures. https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/sustainability-pdf-collection
- IFRS (International Financial Reporting Standards): Sustainability Standards: Press release and summaries. https://www.ifrs.org/news-and-events/news/2023/06/issb-issues-ifrs-s1-ifrs-s2/
- NYSE (New York Stock Exchange): Best Practices for Sustainability Reporting. https://www.nyse.com/esg-guidance
- Philippines: Extended Producer Responsibility Act of 2022. https://emb.gov.ph/wp-content/uploads/2023/04/EPR-Frequently-Asked-Questions.pdf
- SEC, United States (Security and Exchange Commission): Comprehensive Analysis of the SEC's Landmark Climate Disclosure Rule (Deloitte), https://dart.deloitte.com/USDART/home/publications/deloitte/heads-up/2024/sec-climate-disclosure-rule-ghg-emissions-esg-financial-reporting



- SASB (Sustainability Accounting Standards Board, now part of IFRS Foundation): Disclosure standards for the sustainability issues most relevant to investor decision-making in each of 77 industries. https://sasb.ifrs.org/knowledge-hub/
- TCFD (Task Force on Climate-Related Financial Disclosures, now part of the IFRS Foundation). Access is still available for previously developed resources. https://www.fsb-tcfd.org/
- TNFD (Taskforce on Nature-related Financial Disclosures). "Our aim is to support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes, aligned with the Global Biodiversity Framework." https://tnfd.global/publication-getting-started-with-adoption-of-the-tnfd-recommendations/#publication-content
- UK Financial Conduct Authority (FCA): Anti-Greenwashing Rule. "Sustainability-related claims about their products and services must be fair, clear, and not misleading." https://www.fca.org.uk/publication/finalised-guidance/fg24-3.pdf
- UN (United Nations): 2024 Climate Risk Landscape Report. https://www.unepfi.org/wordpress/wp-content/uploads/2024/04/Climate-Risk-Landscape-2024.pdf
- United States: U.S. Federal Sustainability Resources and Guidance. https://www.sustainability.gov/resources.html

Credentials

- IIA (Institute of Internal Auditors): ESG Certificate. Hands-on practical application of critical ESG metric identification and reporting. https://www.theiia.org/en/products/learning-solutions/course/esg-certificate-internal-auditing-for-sustainable-organizations/
- IFRS (International Financial Reporting Standards): Fundamentals of Sustainability Accounting (FSA) Credential®. Understanding the link between sustainability and financial performance. https://www.ifrs.org/products-and-services/sustainability-products-and-services/fsa-credential/
- GRI (Global Reporting Initiative): GRI Certified Sustainability Professional. https://www.globalreporting.org/reporting-support/education/griacademy/



APPENDIX B: ARTIFICIAL INTELLIGENCE RESOURCES

Regulations, standards, and frameworks

- EU (European Union): Artificial Intelligence Act, Summary. https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence
- EU (European Union): Artificial Intelligence Act. https://artificialintelligenceact.eu/
- IIA (Institute of Internal Auditors): Artificial Intelligence Auditing Framework (IIA members only). https://www.theiia.org/en/content/tools/professional/2023/the-iias-updated-ai-auditing-framework/
- IIA (Institute of Internal Auditors): Artificial Intelligence Knowledge Center. https://www.theiia.org/en/resources/knowledge-centers/artificial-intelligence/
- NIST (National Institute of Standards and Technology, U.S. Department of Commerce): Artificial Intelligence Risk Management Framework (AI RMF 1.0). https://www.nist.gov/itl/ai-risk-management-framework
- NIST (National Institute of Standards and Technology, U.S. Department of Commerce): Artificial Intelligence Risk Management Framework Playbook. https://airc.nist.gov/Al-RMF Knowledge Base/Playbook
- NIST (National Institute of Standards and Technology, U.S. Department of Commerce): Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile. https://airc.nist.gov/docs/NIST.AI.600-1.GenAI-Profile.ipd.pdf
- UNESCO (United Nations Educational, Scientific, and Cultural Organization): Ethics of Artificial Intelligence. https://www.unesco.org/en/artificial-intelligence/recommendation-ethics
- UNICRI (United Nations Interregional Crime and Justice Research Institute): Malicious Uses and Abuses of Artificial Intelligence. https://unicri.it/ index.php/node/3278



ACKNOWLEDGMENTS

Internal Audit Foundation Board of Trustees, 2024-25

President: Warren W. Stippich, Jr., CIA, CRMA

Senior Vice President, Strategy: Glenn Ho, CIA, CRMA

Vice President, Finance and Development: Shirley Livhuwani Machaba, CCSA, CRMA

Vice President, Content: Nora Kelani, CIA, CRMA

- Subramanian Bhaskar
- Jose Gabriel Calderon, CIA, CRMA
- Hossam El Shaffei, CCSA, CRMA
- Susan Haseley, CIA

- Dawn Jones, CIA, CRMA
- Reyes Fuentes Ortea, CIA, CCSA, CRMA
- Anthony J. Pugliese, CIA
- Michael A. Smith

Staff liaison: Laura LeBlanc, Senior Director, Internal Audit Foundation

Committee of Research and Education Advisors, 2024-25

Chair: Nora Kelani, CIA, CRMA

- Tonya Arnold-Tornquist, CIA, CRMA
- Christopher Calvin, CIA
- Joseph Ian Canlas, CIA, CRMA
- Andre Domingos
- Christina Duquette, CRMA
- Marc Eulerich, CIA
- Dagmar Flores, CIA, CCSA, CRMA
- Anargul Kairulla, CIA
- Ayaka Mitsunari

- Ahmed Shawky Mohammed, CIA
- Grace Mubako, CIA
- Ruth Doreen Mutebe, CIA
- Thomas O'Reilly
- Emmanuel Pascal, CIA, CRMA
- Brian Tremblay, CIA
- Koji Watanabe
- Stacy Wright, CIA

Staff liaison: Deborah Poulalion, Senior Manager, Research and Insights, The IIA



Africa regional liaison:

 Ruth Doreen Mutebe, Chair, African Federation of Institutes of Internal Auditors (AFIIA) CAE, Umeme, Uganda

Africa report interviewees:

- James Gourrah, CAE and Audit Manager, Capitec Bank
- Eric Yankah, Country Manager, ENERTRAG Ghana Ltd

Project directors:

- Laura LeBlanc, Senior Director, Internal Auditor Foundation
- Deborah Poulalion, Senior Manager, Research and Insights, The IIA

Project manager: Candace Sacher

Research writers:

- Robert Perez (Africa, Latin America, North America, and Global Summary)
- Arthur Piper (Asia Pacific and Middle East)

Graphic designer: Cathy Watanabe



INTERNAL AUDIT FOUNDATION PARTNERS

DIAMOND PARTNERS





Deloitte.









Platinum Partners





Gold Partners

- Fundación Latinoamericana de Auditores Internos
- IIA-Greece
- IIA-Houston
- IIA-Japan
- IIA-New York
- IIA-Singapore
- Nanjing Audit University

President's Circle (Individual Donors)

- Larry Harrington, CIA, QIAL, CRMA
- Stacey Schabel, CIA
- Warren W. Stippich, Jr., CIA, CRMA

Risk in Focus Partners

IIA-Argentina IIA-Kenya IIA-Australia IIA-Malawi IIA-Bolivia IIA-Mexico IIA-Botswana IIA-Morocco IIA-Brazil IIA-Nicaragua IIA-Canada IIA-Nigeria IIA-Chile IIA-Panama IIA-Colombia IIA-Paraguay IIA-Costa Rica IIA-Peru IIA-Democratic **IIA-Philippines** Republic of the Congo IIA-Rwanda IIA-Dominican Republic IIA-Singapore IIA-Ecuador IIA-South Africa IIA-El Salvador IIA-Taiwan (Chinese) IIA-Gabon IIA-Tanzania IIA-Ghana IIA-Uganda IIA-Guatemala IIA-Uruguay IIA-Hong Kong, China IIA-Venezuela IIA-Indonesia IIA-Zambia IIA-Zimbabwe IIA-Japan



ABOUT THE IIA

The Institute of Internal Auditors (IIA) is a nonprofit international professional association that serves more than 245,000 global members and has awarded more than 200,000 Certified Internal Auditor (CIA) certifications worldwide. Established in 1941, The IIA is recognized throughout the world as the internal audit profession's leader in standards, certifications, education, research, and technical guidance. For more information, visit theiia.org.

About the Internal Audit Foundation

The Internal Audit Foundation provides insight to internal audit practitioners and their stakeholders, promoting and advancing the value of the internal audit profession globally. Through the Academic Fund, the Foundation supports the future of the profession through grants to support internal audit education at institutions of higher education. For more information, visit theiia.org/Foundation.

Disclaimer and Copyright

The IIA publishes this document for informational and educational purposes. This material is not intended to provide definitive answers to specific individual circumstances and as such is only intended to be used as a guide. The IIA recommends seeking independent expert advice relating directly to any specific situation. The IIA accepts no responsibility for anyone placing sole reliance on this material.

Copyright © 2024 by the Internal Audit Foundation. All rights reserved. For permission to republish, please contact Copyright@theiia.org.



Global Headquarters | The Institute of Internal Auditors 1035 Greenwood Blvd., Suite 401 | Lake Mary, FL 32746, USA

Phone: +1-407-937-1111 | Fax: +1-407-937-1101

Web: theiia.org/Foundation

