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Designing Risk-Based Compliance Frameworks for Financial and Insurance Institutions in Multi-Jurisdictional Environments

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Abstract

In an era of heightened regulatory scrutiny and globalized operations, financial and insurance institutions face significant challenges in maintaining compliance across multiple jurisdictions. Designing a robust risk-based compliance framework is essential for these organizations to efficiently manage regulatory obligations while aligning compliance efforts with business objectives and risk exposure. This explores the strategic and operational considerations involved in developing such frameworks, emphasizing the need for adaptability, scalability, and legal alignment in diverse regulatory environments. A risk-based approach allows institutions to prioritize resources based on the level of exposure, likelihood, and potential impact of compliance risks. Unlike a one-size-fits-all model, it provides flexibility to account for variations in regulatory requirements across jurisdictions, such as those found in the U.S., European Union, and Asia-Pacific regions. Core components of an effective framework include governance structures, jurisdictional risk mapping, control implementation, ongoing monitoring, and regulatory reporting mechanisms. The framework must be underpinned by strong data management and supported by emerging technologies such as regulatory technology (RegTech), AI, and machine learning, which enhance surveillance and decision-making capabilities. This also addresses integration strategies, including centralized vs. decentralized compliance functions, group-level oversight, and the resolution of legal and operational conflicts arising from cross-border operations. Real-world case studies highlight common pitfalls such as siloed compliance teams or inadequate jurisdictional understanding and showcase best practices that drive organizational resilience and regulatory confidence. Ultimately, this review proposes that a well-designed risk-based compliance framework is not only a regulatory necessity but also a competitive differentiator. It enables financial and insurance firms to navigate the complexities of global regulation proactively, reduce compliance costs, and build trust with regulators, clients, and stakeholders. This approach positions organizations for sustainable growth in an increasingly interconnected and regulated financial ecosystem.

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1. Introduction

A risk-based compliance framework is a structured and dynamic approach to managing regulatory obligations by aligning compliance efforts with an institution's specific risk exposure (Nwabeke *et al.*, 2021; OJIKA *et al.*, 2021). Rather than applying uniform controls across all business activities, this method prioritizes regulatory risks based on their severity and probability, allowing financial and insurance institutions to allocate resources more effectively.

The purpose of such a framework is to ensure that compliance is both efficient and adaptive to changing regulatory landscapes, especially in sectors where operations are inherently complex and span multiple jurisdictions (Nwabekee *et al.*, 2021; Onoja *et al.*, 2021). By focusing on risk severity and business impact, these frameworks promote not only legal adherence but also organizational resilience (Iyabode, 2015; Faith, 2018).

In financial and insurance institutions, the importance of a risk-based compliance framework cannot be overstated. These sectors are highly regulated due to their potential impact on financial markets, consumer protection, and systemic stability (OKOLO *et al.*, 2021; Oyeniyi *et al.*, 2021). Compliance failures can lead to substantial penalties, reputational damage, and even license revocation. Institutions must navigate a wide array of regulatory areas, including anti-money laundering (AML), data privacy, solvency requirements, and consumer conduct rules. A risk-based framework helps ensure that higher-risk activities—such as international transactions, complex derivatives, or underwriting in volatile markets—are subject to more rigorous oversight (Hassan *et al.*, 2021; Okolie *et al.*, 2021). This targeted approach enhances compliance effectiveness and reduces unnecessary administrative burden on low-risk areas, thereby supporting operational efficiency and regulatory credibility (Imran *et al.*, 2019; Egbuhuzor *et al.*, 2021).

However, implementing such frameworks becomes particularly challenging in multi-jurisdictional environments. Financial and insurance firms that operate globally must contend with a patchwork of regulatory regimes, which may differ significantly in scope, interpretation, and enforcement (Abimbade *et al.*, 2017; Edwards *et al.*, 2018). Conflicting requirements across jurisdictions—such as differing data protection laws (e.g., GDPR in the EU vs. CCPA in the U.S.) or solvency standards—can complicate compliance strategies. Additionally, cultural, legal, and linguistic barriers can impede the consistent application of compliance policies. Institutions must therefore design frameworks that are both globally coherent and locally adaptable, balancing central governance with jurisdiction-specific customization (Akinyemi and Ojetunde, 2020; Adelana and Akinyemi, 2021).

The objective of this review is to present a comprehensive methodology for designing and implementing risk-based compliance frameworks suited to financial and insurance institutions operating in multi-jurisdictional contexts. The review explores the key elements of such a framework, including governance, risk assessment, control implementation, and technology integration. It also offers practical guidance on aligning compliance functions across legal entities, responding to dynamic regulatory changes, and leveraging emerging technologies such as RegTech and AI for more efficient risk management. Furthermore, the review highlights best practices, potential pitfalls, and strategic considerations based on real-world case studies and regulatory expectations. The ultimate aim is to help institutions transform compliance from a reactive obligation into a proactive, value-generating function that enhances both regulatory standing and organizational performance (Akinyemi, 2013; Akinyemi *et al.*, 2021).

2. Methodology

A systematic literature review was conducted following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to identify and evaluate scholarly and grey literature relevant to risk-based compliance frameworks in financial and insurance sectors across multi-jurisdictional settings. The review aimed to synthesize best practices, regulatory challenges, and theoretical foundations to inform the design of effective compliance models adaptable to cross-border regulatory complexity.

The search strategy involved a comprehensive query of multiple databases, including Scopus, Web of Science, JSTOR, SSRN, and Google Scholar, using combinations of keywords such as "risk-based compliance," "regulatory frameworks," "financial institutions," "insurance compliance," and "multi-jurisdictional regulation." Boolean operators and filters for peer-reviewed publications, English language, and publication dates between 2000 and 2024 were applied to refine results. Additional grey literature, including regulatory whitepapers, industry reports, and legal analyses, was retrieved through targeted searches on websites of global regulatory bodies such as the Financial Action Task Force (FATF), International Association of Insurance Supervisors (IAIS), and Basel Committee on Banking Supervision.

After removing duplicates, titles and abstracts were screened for relevance, and full-text articles were assessed against inclusion criteria that required specific discussion of risk-based compliance mechanisms, relevance to financial or insurance sectors, and applicability across multiple jurisdictions. Studies lacking empirical or conceptual focus, those limited to single-jurisdictional scope without broader implications, or publications not addressing compliance models were excluded. A total of 172 articles were initially identified, of which 48 met the inclusion criteria following full-text review.

Data from the included studies were extracted using a standardized coding framework capturing variables such as compliance risk typologies, regulatory harmonization strategies, cross-border governance models, enforcement mechanisms, and technological tools supporting compliance. Qualitative synthesis was performed to identify thematic patterns and gaps, which informed the conceptual foundation for proposing a robust, adaptable compliance framework. Bias was mitigated by involving multiple reviewers in the screening and selection process and resolving discrepancies through consensus.

2.1 Regulatory landscape overview

In today's globalized financial and insurance sectors, institutions must navigate an increasingly complex and expansive regulatory landscape. This landscape is shaped by both global standards and regional or national regulations, each imposing unique compliance expectations (Adedaja *et al.*, 2017; Famaye *et al.*, 2020). While global regulatory frameworks aim to promote standardization and systemic stability, variations in regional and domestic laws often result in fragmented obligations. This section provides a detailed overview of the key regulatory regimes and examines the tension between regulatory harmonization and fragmentation.

Several international organizations establish baseline regulatory standards to ensure financial system integrity and stability across jurisdictions. These frameworks are not legally binding but serve as reference points for national authorities.

Financial Action Task Force (FATF), is the primary international body setting standards for anti-money laundering (AML), counter-terrorist financing (CTF), and the prevention of proliferation financing. Its 40 Recommendations form the cornerstone of global AML/CTF regimes. Institutions must implement customer due diligence (CDD), transaction monitoring, and suspicious activity reporting systems in line with FATF guidelines. Non-compliance can lead to a country being listed as high-risk or uncooperative, affecting cross-border operations and reputational standing.

Basel III, developed by the Basel Committee on Banking Supervision, focuses on bank capital adequacy, liquidity standards, and risk management practices. It introduces stricter capital requirements, leverage ratios, and liquidity coverage ratios to strengthen bank resilience. Solvency II, its insurance counterpart in the EU, establishes risk-based capital requirements and governance standards for insurers. It emphasizes internal risk assessment models and the market-consistent valuation of liabilities, influencing global best practices in insurance supervision (Adeniran *et al.*, 2016; Akinyemi and Ebimomi, 2020).

The Organisation for Economic Co-operation and Development (OECD) provides broad guidelines on financial transparency, tax compliance (e.g., BEPS project), and corporate governance. Its Common Reporting Standard (CRS) mandates automatic exchange of financial account information across jurisdictions to combat tax evasion, directly impacting cross-border data reporting and customer documentation.

While global frameworks guide high-level principles, local regulations introduce jurisdiction-specific obligations that financial and insurance institutions must integrate into their compliance programs.

The U.S. regulatory regime is decentralized. The Securities and Exchange Commission (SEC) oversees capital markets and enforces financial disclosure and fraud prevention laws. FINRA governs broker-dealer conduct and market integrity, while the National Association of Insurance Commissioners (NAIC) issues model laws for state-level adoption by insurance regulators. U.S. entities must also comply with the Bank Secrecy Act and OFAC sanctions, making the compliance landscape particularly intricate (Aremu and Laolu, 2014; Akinyemi and Ojetunde, 2019).

The European Insurance and Occupational Pensions Authority (EIOPA) sets pan-European standards for insurance regulation, including Solvency II enforcement. The General Data Protection Regulation (GDPR) imposes strict

personal data handling obligations, directly affecting customer onboarding, marketing, and reporting. The Anti-Money Laundering Directives (AMLDs), now in their sixth iteration, require enhanced due diligence, beneficial ownership transparency, and centralized AML supervision mechanisms.

In the Asia-Pacific region, regulatory approaches vary widely. The Monetary Authority of Singapore (MAS) and the Hong Kong Monetary Authority (HKMA) are recognized for progressive fintech regulations and robust AML enforcement. The Australian Prudential Regulation Authority (APRA) emphasizes risk-based supervision, solvency standards, and operational resilience for banks and insurers. Regulatory reforms in emerging markets, such as India and Indonesia, continue to evolve and influence regional compliance dynamics.

The coexistence of international standards and regional laws has led to ongoing tension between regulatory harmonization and fragmentation. Harmonization efforts—such as the EU's Single Market or the Basel Accords—aim to create uniformity, enabling consistent compliance practices and facilitating cross-border operations (James *et al.*, 2019; Kolade *et al.*, 2021). They also foster regulatory cooperation and reduce the burden of overlapping audits and enforcement. However, fragmentation persists due to national sovereignty, political priorities, and localized risks. For example, while FATF standards are globally endorsed, their implementation varies significantly. Similarly, U.S. sanctions laws often conflict with EU privacy rules, creating legal dilemmas for multinational institutions. These inconsistencies can lead to compliance duplication, legal uncertainty, and operational inefficiencies.

Financial and insurance institutions must develop adaptive, risk-based compliance frameworks capable of addressing both the harmonized principles of global standards and the fragmented realities of national regulations. A well-designed compliance strategy must be agile, context-aware, and technology-enabled to succeed in this complex regulatory environment.

2.2 Core components of a risk-based compliance framework

A risk-based compliance framework is an essential mechanism for ensuring that financial and insurance institutions operate within regulatory expectations while effectively managing potential compliance risks across various jurisdictions (Olanipekun, 2020; Okeke *et al.*, 202). This approach enables organizations to allocate resources efficiently, focusing on areas of higher risk while maintaining an appropriate level of oversight in lower-risk areas. The effectiveness of such a framework hinge on several interrelated components that collectively support robust compliance management as shown in figure 1.



Fig 1: Core Components of a Risk-Based Compliance Framework

Governance and oversight form the foundational pillar of a risk-based compliance framework. The board of directors and executive leadership bear ultimate accountability for the organization's compliance posture. Their role includes setting a clear compliance tone at the top, ensuring that compliance is integrated into strategic planning, and allocating adequate resources. Additionally, establishing a compliance committee structure comprising senior representatives from legal, operations, risk, and compliance functions ensures cross-functional oversight and promotes shared responsibility for regulatory adherence.

The framework's strength is largely dependent on risk identification and assessment, which requires a detailed understanding of the organization's internal and external risk environment. This begins with business line and product risk profiling, where each service, client segment, and product offering is evaluated based on its inherent compliance risks. Complementing this is jurisdictional risk mapping, which recognizes the regulatory complexity of operating in multiple regions, each with distinct laws, enforcement intensity, and regulatory expectations. A nuanced understanding of jurisdiction-specific requirements enables more precise allocation of compliance controls.

Following identification, risk categorization and prioritization is essential to tailor compliance strategies. Organizations must differentiate between high-risk and low-risk activities using a systematic methodology that factors in the likelihood and impact of non-compliance. Establishing a defined risk appetite and tolerance threshold provides a benchmark against which risk decisions can be made. These thresholds should be calibrated to reflect the organization's strategic objectives, regulatory obligations, and stakeholder expectations, allowing for dynamic risk governance (Ojika *et al.*, 2022; Okeke *et al.*, 2022).

Effective control design and implementation translates risk analysis into practical mitigative actions. This involves deploying preventive controls (e.g., training, pre-transaction screening), detective controls (e.g., transaction monitoring,

alerts), and corrective controls (e.g., incident response plans). In modern financial and insurance institutions, the role of technology and automation has become indispensable. Technologies such as machine learning, artificial intelligence, and robotic process automation enable real-time monitoring, pattern recognition, and rule-based decision-making, significantly enhancing the precision and responsiveness of compliance controls.

To ensure ongoing effectiveness, monitoring, testing, and auditing must be embedded within the framework. Continuous surveillance, including transaction monitoring, staff behavior analytics, and customer due diligence updates, allows early detection of anomalies and risk trends. Independent compliance reviews, often conducted by internal audit or external third parties, provide an objective assessment of the framework's performance and compliance with internal policies and regulatory standards.

An effective compliance system must include robust reporting and escalation mechanisms. These allow for timely communication of compliance breaches, risk exposures, or regulatory inquiries to the appropriate governance bodies. Escalation protocols should be clear, with defined thresholds and responsibilities, enabling swift and proportionate response to emerging risks or violations (Okeke *et al.*, 2022; Okolo *et al.*, 2022).

Lastly, documentation and recordkeeping are critical to demonstrate compliance integrity. Comprehensive records of risk assessments, policy decisions, control activities, monitoring outcomes, and reporting incidents serve as evidence for regulatory audits and internal reviews. Sound documentation supports transparency and ensures that compliance decisions are traceable, reproducible, and auditable.

A risk-based compliance framework must be dynamic, holistic, and proportionate to the institution's risk exposure and regulatory environment. By systematically integrating governance, risk assessment, control mechanisms, monitoring, reporting, and documentation, financial and

insurance organizations can better navigate complex regulatory landscapes while safeguarding their integrity and reputation.

2.3 Jurisdictional integration strategies

In a world of increasingly interconnected markets and diverse legal systems, financial and insurance institutions must implement sophisticated jurisdictional integration strategies to ensure effective compliance across multiple regulatory environments (Okeke *et al.*, 2022; Ogunwole *et al.*, 2022). A risk-based compliance framework must account for both enterprise-level coherence and local legal specificity. This section explores critical structural and operational choices—such as centralized versus decentralized compliance models, global compliance hubs, and legal entity alignment—while offering insights on how to navigate conflicting legal obligations and maintain effective regulatory engagement.

A key strategic decision in designing a compliance framework is choosing between a centralized or decentralized compliance model—or a hybrid of both. A centralized model consolidates compliance oversight, policy-making, and risk assessments at the group level. This promotes uniformity, efficiency, and consistency in controls across jurisdictions. It also allows for economies of scale and better integration of RegTech and data analytics platforms.

In contrast, a decentralized model delegates compliance authority to regional or local entities, allowing for jurisdiction-specific responsiveness and closer alignment with local regulations and business practices. This is especially valuable where legal and cultural differences are pronounced, or where regulatory regimes are particularly dynamic. The trade-off is potential inconsistency and duplicated effort across business units. Many global institutions now adopt a hybrid approach, centralizing policy development while allowing local teams to implement tailored procedures based on risk and regulatory context (Okolo *et al.*, 2022; Okeke *et al.*, 2022).

To optimize both compliance oversight and operational efficiency, institutions increasingly rely on global compliance hubs. These regional centers serve as compliance control points for specific geographical clusters (e.g., EMEA, APAC, Americas). Hubs streamline monitoring, training, and reporting functions while enabling quicker response times to local regulatory changes (Subramanyam, 2021). They also facilitate cross-border coordination, allowing institutions to balance group-level policy adherence with local customization. Effective compliance hubs require robust infrastructure, skilled personnel, and governance protocols that link them tightly to both central leadership and on-the-ground business units.

Another crucial consideration is the distinction between legal entity-level compliance and group-level compliance. Regulators often hold each legal entity within a corporate group independently accountable for compliance, regardless of the group's central controls. This necessitates the development of tailored compliance frameworks at the entity level, with clear delineation of responsibilities, controls, and reporting obligations.

Group-level compliance, meanwhile, offers strategic oversight, consistency, and enterprise-wide risk aggregation. The challenge lies in aligning both levels without redundancy or conflict. Institutions must ensure that local compliance programs meet national regulatory standards while fitting seamlessly into the group's overarching governance and risk appetite framework (Okeke *et al.*, 2022; Ojika *et al.*, 2022). Operating in multiple jurisdictions often exposes institutions to conflicting legal obligations. Similarly, the extraterritorial reach of laws such as the U.S. Foreign Account Tax Compliance Act (FATCA) and the EU's General Data Protection Regulation (GDPR) can place institutions in difficult compliance positions.

Strategies to manage such conflicts include legal structuring (e.g., ring-fencing sensitive operations), use of localized service providers, obtaining legal opinions, and implementing jurisdiction-specific controls. Institutions may also need to develop escalation protocols and governance committees to resolve legal conflicts systematically, including involving legal counsel and regulators when necessary.

Proactive regulatory engagement is essential to successful jurisdictional integration. Institutions must cultivate transparent and collaborative relationships with regulators at all levels. This includes regular communication, participation in industry consultations, and early notification of potential compliance breaches or strategic changes. Developing regulatory relationship management teams—often embedded within compliance hubs—can foster trust and reduce the risk of enforcement action (Okeke *et al.*, 2022; Ogunwole *et al.*, 2022).

Additionally, institutions should invest in regulatory intelligence capabilities to monitor evolving rules, track enforcement trends, and assess reputational risk. Building a strong compliance culture that values openness, responsiveness, and cooperation with regulators can significantly enhance institutional credibility and regulatory outcomes.

Jurisdictional integration requires a nuanced, multilayered strategy that aligns structural choices with legal realities (Armitage *et al.*, 2020; Sun *et al.*, 2021). Institutions must remain agile, adopting both global standards and local solutions to navigate the complexities of cross-border compliance effectively.

2.4 Role of technology and data in compliance

The evolution of regulatory expectations, increasing data complexity, and the global expansion of financial and insurance services have made technology a critical enabler of modern compliance frameworks (Okeke *et al.*, 2022; Aniebonam *et al.*, 2022). A data-driven, technology-enabled approach allows institutions to scale their compliance efforts, respond swiftly to regulatory changes, and manage risks more proactively as shown in figure 2. This section explores the role of Regulatory Technology (RegTech), data analytics for risk scoring, cross-border data management, and the application of artificial intelligence (AI) and machine learning (ML) in compliance monitoring.

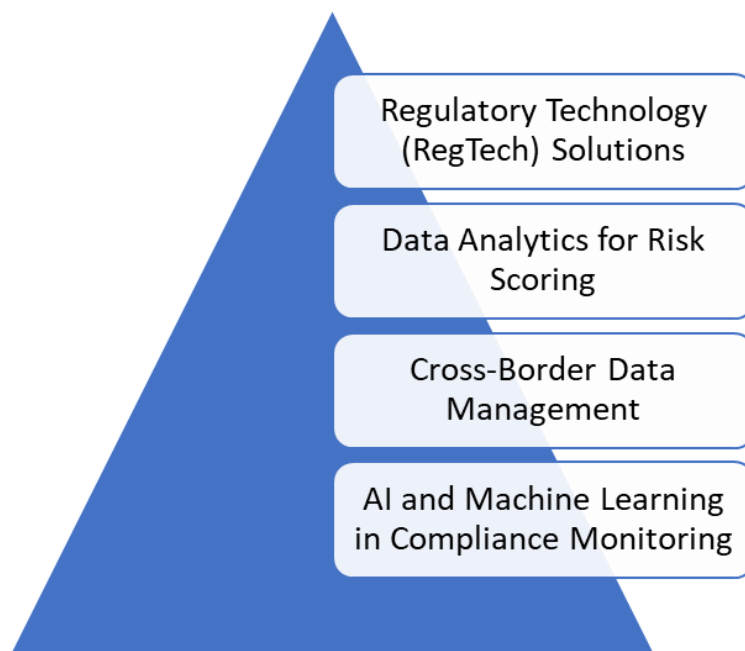


Fig 2: Role of Technology and Data in Compliance

RegTech refers to the use of innovative technologies to streamline regulatory processes, automate compliance functions, and improve risk management. These solutions are designed to reduce the cost and complexity of compliance by replacing manual processes with real-time, automated systems. Key applications include transaction monitoring, regulatory reporting, identity verification (KYC), and policy management.

For instance, RegTech platforms can automate the process of scanning and interpreting new regulations, thereby allowing compliance teams to rapidly assess their applicability and implement necessary changes. Smart documentation tools ensure that firms stay audit-ready by maintaining up-to-date compliance records (Munoko *et al.*, 2020; Hamdani *et al.*, 2021). Additionally, workflow automation reduces the human error risk associated with complex regulatory tasks, such as AML screening or sanctions checks. In the insurance industry, RegTech supports automated claims auditing, premium validation, and conduct risk monitoring.

One of the most powerful applications of technology in compliance is the use of data analytics to support risk-based decision-making. By leveraging large volumes of structured and unstructured data, institutions can develop sophisticated risk scoring models that assess the likelihood and impact of compliance breaches across products, customers, geographies, and business lines (Onotole *et al.*, 2022; Ogunyankinnu *et al.*, 2022).

These risk scores inform resource allocation enabling compliance teams to focus on high-risk areas and serve as inputs to monitoring systems that trigger alerts or require enhanced due diligence (Chandrashekar and Jangampet, 2020; Hakim, 2020). Predictive analytics also plays a growing role, helping institutions forecast emerging compliance risks and respond before they materialize. Integration of external data sources such as adverse media, legal databases, and social media further enhances the precision of these models.

Operating across multiple jurisdictions requires careful attention to cross-border data management, as regulatory

regimes often impose conflicting or overlapping requirements regarding data privacy, localization, and transfer. For instance, the European Union's General Data Protection Regulation (GDPR) imposes stringent conditions on personal data transfers outside the EU, while countries like China and Russia have enacted data localization laws requiring that certain information be stored domestically (Noah, 2022; Akinyemi *et al.*, 2022).

To remain compliant, institutions must establish data governance frameworks that ensure transparency, traceability, and accountability in data handling. Technologies such as data classification tools, encryption, and secure data lakes help maintain regulatory boundaries while supporting global compliance operations. Data lineage and audit trails are essential for demonstrating compliance during regulatory inspections or investigations (Parab *et al.*, 2020; Chundru, 2021).

Furthermore, institutions must assess the legal and operational risks associated with cloud-based RegTech solutions, especially when service providers operate from different jurisdictions. Contracts, data access controls, and encryption must be designed to align with the most restrictive applicable standards.

Artificial intelligence (AI) and machine learning (ML) are revolutionizing compliance monitoring by enabling systems to detect complex patterns, adapt over time, and reduce false positives (Ezekiel and Akinyemi, 2022; Akinyemi and Ezekiel, 2022). These technologies are particularly useful in areas like transaction surveillance, fraud detection, and insider trading monitoring.

AI algorithms can learn from historical compliance outcomes to identify behaviors or transactions that deviate from norms, even when no specific rules have been violated (Deng, 2020; Khurana, 2020). Similarly, natural language processing (NLP) tools are used to review communications (e.g., emails, chats) for signs of misconduct or policy violations.

However, the adoption of AI in compliance must be approached carefully. Model transparency, data bias, and accountability remain critical challenges. Regulatory

guidance increasingly emphasizes the need for explainability in AI-driven decisions, particularly when they affect customer rights or regulatory obligations.

Technology and data are now foundational to effective compliance management in financial and insurance institutions. RegTech solutions streamline routine tasks, while data analytics and AI enable real-time risk detection and monitoring. Institutions that leverage these technologies responsibly and strategically gain not only compliance efficiency but also competitive advantage in an increasingly regulated and data-centric environment (Aremu *et al.*, 2022; Kolade *et al.*, 2022).

2.5 Common pitfalls and challenges

Implementing an effective risk-based compliance framework in financial and insurance institutions is critical for maintaining regulatory integrity, mitigating legal exposure, and ensuring operational resilience (Attah *et al.*, 2022; Onoja *et al.*, 2022). However, organizations frequently encounter significant pitfalls and challenges that can compromise the effectiveness of these frameworks. These challenges arise from structural, procedural, and strategic shortcomings, many of which stem from the complex, evolving nature of the regulatory environment.

One of the most pervasive issues is the problem of over- or under-compliance. Over-compliance occurs when organizations impose excessive controls and policies that go beyond regulatory requirements, often as a defensive reaction to regulatory scrutiny or enforcement actions. While this may reduce legal exposure, it can also stifle innovation, increase operational costs, and create unnecessary bureaucratic overhead. On the other hand, under-compliance results when institutions fail to meet regulatory expectations, either due to insufficient controls, poor risk awareness, or lack of resources as shown in figure 3 (Burdon and Sorour, 2020; Kim, 2020). Both scenarios reflect a misalignment between risk exposure and compliance effort. A balanced, risk-based approach is essential calibrating controls to the nature and scale of actual risks while avoiding overburdening the organization.

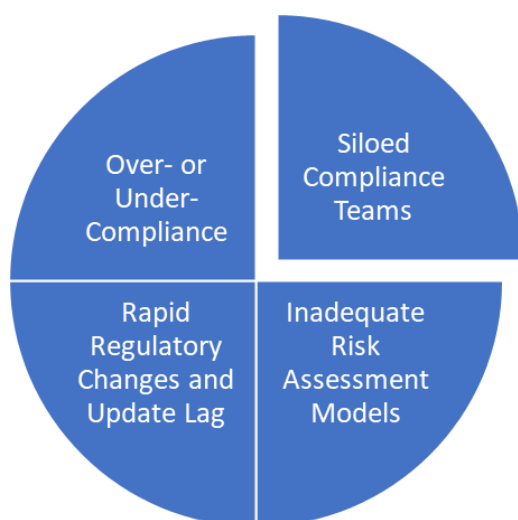


Fig 3: Common Pitfalls and Challenges

Siloed compliance teams represent another significant challenge. In many institutions, compliance responsibilities are fragmented across departments, with little coordination or data sharing. This structural disconnect leads to duplication of efforts, inconsistent policies, and blind spots in risk management. A fragmented approach undermines the enterprise-wide view of risk and hampers the institution's ability to respond cohesively to regulatory developments or internal breaches. Breaking down silos through centralized governance structures, cross-functional compliance committees, and integrated technology platforms is essential for enabling a unified compliance strategy (Nel *et al.*, 2020; Meiring, 2021).

Another common pitfall lies in inadequate risk assessment models. Effective risk-based compliance requires accurate and dynamic identification of compliance risks. However, many institutions rely on static or overly simplistic models that fail to capture the complexities of their operations or external environment (Okeke *et al.*, 2022; Onoja and Ajala, 2022). These models may not incorporate critical variables such as evolving product lines, new customer behaviors, geopolitical risk, or cross-border regulatory divergence. Consequently, compliance efforts may be misdirected, with resources devoted to low-priority risks while higher-risk areas remain underprotected. Enhancing risk assessment requires the use of data analytics, continuous feedback mechanisms, and periodic model validation to ensure that the framework remains reflective of actual and emerging risk realities.

The rapid pace of regulatory change and the lag in organizational updates also pose a substantial challenge. Regulators across jurisdictions are continually issuing new guidelines, enforcement interpretations, and reporting requirements. Institutions often struggle to keep pace, especially those operating in multiple jurisdictions with divergent regulatory standards. Delayed updates to internal policies, training programs, and control mechanisms can expose institutions to inadvertent non-compliance. The challenge is compounded when institutions rely on manual tracking or siloed regulatory intelligence functions. To address this, institutions must invest in agile compliance infrastructures—such as regulatory technology (RegTech) solutions—that provide real-time alerts and automate the integration of regulatory changes into compliance operations (Collins *et al.*, 2022; Okolie *et al.*, 2022).

The implementation of risk-based compliance frameworks is fraught with challenges that can undermine their effectiveness if not proactively addressed. Over- or under-compliance, organizational silos, weak risk models, and lagging adaptation to regulatory change are common pitfalls that stem from misaligned strategy, poor communication, and technological gaps (Okeke *et al.*, 2022; Adepoju *et al.*, 2022). Institutions must adopt an integrated, data-driven, and agile approach to compliance, ensuring that governance structures, risk assessments, and compliance operations are synchronized and responsive to an increasingly complex regulatory landscape. Recognizing and rectifying these pitfalls is essential for building resilient compliance frameworks capable of withstanding scrutiny and supporting sustainable business growth.

2.6 Recommendations and best practices

The development and implementation of a robust risk-based compliance framework for financial and insurance institutions in multi-jurisdictional environments require not only technical precision but also a deep commitment to ongoing governance, cultural alignment, and industry collaboration. As regulatory demands grow more complex, institutions must transition from a reactive posture to a proactive compliance strategy. This section outlines key recommendations and best practices, including the integration of compliance into corporate culture, the design of tailored training programs, continuous framework enhancement, and the use of collaborative mechanisms through industry bodies.

One of the most important, yet often underestimated, components of an effective compliance framework is the integration of compliance into the organization's corporate culture. Compliance must be viewed not simply as a regulatory requirement, but as a core business function that supports ethical behavior, customer trust, and long-term sustainability. This cultural alignment begins at the top: boards of directors and senior leadership must set a clear tone by emphasizing the strategic importance of compliance and risk management.

Embedding compliance culture involves creating an environment where employees feel accountable and empowered to report concerns, ask questions, and make ethical decisions. Institutions should implement clear codes of conduct, reward ethical behavior, and ensure that compliance objectives are aligned with business incentives. Culture surveys, compliance metrics in performance evaluations, and leadership visibility in compliance initiatives all contribute to reinforcing these values.

In a multi-jurisdictional context, training and awareness are critical to ensuring that compliance programs are effectively translated into daily operations. One-size-fits-all training approaches often fail to capture the nuance of local regulatory requirements and cultural expectations. Therefore, institutions should develop tailored training programs that reflect regional legal obligations, languages, risk exposures, and job functions.

Training should be continuous, interactive, and relevant. Role-specific modules—for example, tailored training for underwriters, relationship managers, or claims analysts—ensure that employees understand their specific compliance responsibilities. Additionally, scenario-based learning, simulations, and e-learning platforms can help staff better internalize complex regulatory concepts.

Monitoring participation and assessing comprehension through testing or practical assessments is essential to measure effectiveness. Moreover, training programs should be periodically reviewed and updated in response to regulatory changes, audit findings, or new business initiatives.

Given the dynamic nature of regulatory environments and risk profiles, a risk-based compliance framework must be subject to ongoing review and enhancement. Institutions should establish formal governance structures—such as compliance risk committees and internal audit functions—to periodically assess the effectiveness and relevance of their compliance controls and policies.

Key review triggers include regulatory updates, enforcement trends, changes in business strategy, new products, and

external audit outcomes. A robust compliance management system (CMS) should include key performance indicators (KPIs), issue tracking, and root cause analysis tools to support continuous improvement.

Frameworks must also be stress-tested through scenario analysis and crisis simulations to evaluate their resilience under adverse conditions. These exercises help identify control gaps and reinforce compliance preparedness across functions and geographies.

In complex regulatory landscapes, no institution operates in isolation. Participation in industry bodies and regulatory forums is an essential best practice that supports informed, consistent, and forward-looking compliance strategies. Through these channels, institutions can share insights, contribute to policy consultations, and benchmark their practices against peers.

Collaboration helps in identifying emerging risks, interpreting ambiguous regulations, and advocating for proportionate and harmonized rules. Examples include membership in national financial industry associations, engagement with supranational bodies like the Financial Stability Board, and participation in working groups on regulatory technology, cybersecurity, or ESG compliance.

In addition, institutions can collaborate on shared challenges, such as collective responses to data privacy rules or the development of sector-wide AML typologies. This not only enhances efficiency but also contributes to broader systemic stability and regulatory transparency.

Effective compliance in a multi-jurisdictional environment requires more than robust systems and controls—it demands an integrated strategy that promotes ethical behavior, adapts to evolving risks, and fosters collaboration. By embedding compliance into culture, tailoring training programs, conducting regular framework reviews, and engaging with industry peers, financial and insurance institutions can transform compliance into a source of strategic strength and resilience.

3. Conclusion

In conclusion, risk-based compliance is no longer a mere regulatory necessity but a strategic asset that adds significant value to financial and insurance institutions. By aligning compliance efforts with actual risk profiles, organizations can better allocate resources, minimize unnecessary costs, and enhance their ability to proactively address emerging risks. This approach not only helps institutions meet legal obligations but also fosters a culture of compliance that integrates seamlessly with overall business strategy. When effectively implemented, risk-based compliance enhances an organization's reputation, operational efficiency, and long-term sustainability.

As regulatory landscapes continue to evolve, institutions must remain agile to keep pace with ever-changing rules and standards. The complexity of cross-border regulations, coupled with rapid technological advancements and shifts in global political dynamics, demands that compliance frameworks are continually adapted. Institutions must leverage advanced technologies, such as regulatory technology (RegTech), to streamline compliance processes, automate monitoring, and ensure that regulatory updates are integrated efficiently. A proactive, rather than reactive, approach to regulatory changes will allow organizations to anticipate new compliance requirements before they become

binding, ensuring timely adjustments to their frameworks. Looking ahead, the future of global compliance operations lies in greater integration and collaboration. With globalization driving an increasingly interconnected financial ecosystem, the need for cross-border regulatory consistency and harmonization is more pressing than ever. The future of compliance will likely be characterized by global standards that facilitate easier cooperation across jurisdictions. Additionally, technology-driven innovations will play a critical role in managing compliance at scale, with artificial intelligence, data analytics, and blockchain transforming how institutions monitor, report, and audit compliance activities. Institutions that embrace these advancements will be better positioned to navigate the complexities of global compliance and foster trust with regulators and stakeholders alike.

4. References

1. Abimbade O, Akinyemi A, Bello L, Mohammed H. Comparative effects of an individualized computer-based instruction and a modified conventional strategy on students' academic achievement in organic chemistry. *Journal of Positive Psychology and Counseling*. 2017;1(2):1–19.
2. Adedija G, Abimbade O, Akinyemi A, Bello L. Discovering the power of mentoring using online collaborative technologies. *Advancing Education Through Technology*. 2017;261–81.
3. Adelana OP, Akinyemi AL. Artificial intelligence-based tutoring systems utilization for learning: A survey of senior secondary students' awareness and readiness in Ijebu-Ode, Ogun State. *UNIZIK Journal of Educational Research and Policy Studies*. 2021;9:16–28.
4. Adeniran BI, Akinyemi AL, Aremu A. The effect of Webquest on civic education of junior secondary school students in Nigeria. *Proceedings of INCEDI 2016 Conference 29th-31st August*. 2016;109–20.
5. Adepoju AH, Austin-Gabriel BLESSING, Eweje ADEOLUWA, Collins ANUOLUWAPO. Framework for automating multi-team workflows to maximize operational efficiency and minimize redundant data handling. *IRE Journals*. 2022;5(9):663–4.
6. Adepoju AH, Austin-Gabriel BLESSING, Hamza OLADIMEJI, Collins ANUOLUWAPO. Advancing monitoring and alert systems: A proactive approach to improving reliability in complex data ecosystems. *IRE Journals*. 2022;5(11):281–2.
7. Akinyemi A, Ojetunde SM. Comparative analysis of networking and e-readiness of some African and developed countries. *Journal of Emerging Trends in Educational Research and Policy Studies*. 2019;10(2):82–90.
8. Akinyemi AL, Ebimomi OE. Influence of gender on students' learning outcomes in computer studies. *Education Technology*. 2020.
9. Akinyemi AL, Ezekiel OB. University of Ibadan lecturers' perception of the utilisation of artificial intelligence in education. *Journal of Emerging Trends in Educational Research and Policy Studies*. 2022;13(4):124–31.
10. Akinyemi AL, Ojetunde SM. Techno-pedagogical models and influence of adoption of remote learning platforms on classical variables of education inequality during COVID-19 pandemic in Africa. *Journal of Positive Psychology and Counseling*. 2020;7(1):12–27.
11. Akinyemi AL. Development and utilisation of an instructional programme for impacting competence in language of graphics orientation (LOGO) at primary school level in Ibadan, Nigeria [Doctoral dissertation]. 2013.
12. Akinyemi AL, Adelana OP, Olurinola OD. Use of infographics as teaching and learning tools: Survey of pre-service teachers' knowledge and readiness in a Nigerian university. *Journal of ICT in Education*. 2022;9(1):117–30.
13. Akinyemi AL, Ogundipe T, Adelana OP. Effect of scratch programming language (SPL) on achievement in geometry among senior secondary students in Ibadan, Nigeria. *Journal of ICT in Education*. 2021;8(2):24–33.
14. Aniebonam EE, Nwabekee US, Ogunsola OY, Elumilade OO. *International Journal of Management and Organizational Research*. 2022.
15. Aremu A, Laolu AA. Language of graphics orientation (LOGO) competencies of Nigerian primary school children: Experiences from the field. *Journal of Educational Research and Reviews*. 2014;2(4):53–60.
16. Aremu A, Akinyemi LA, Olanokunmi IA, Ogundipe T. Raising the standards/quality of UBE teachers through technology-mediated strategies and resources. *Emerging Perspectives on Universal Basic Education: A Book of Readings on Basic Education in Nigeria*. 2022;139–49.
17. Armitage D, Mbatha P, Muhl EK, Rice W, Sowman M. Governance principles for community-centered conservation in the post-2020 global biodiversity framework. *Conservation Science and Practice*. 2020;2(2):e160.
18. Attah JO, Mbakuuv SH, Ayange CD, Achive GW, Onoja VS, Kaya PB, *et al.* Comparative recovery of cellulose pulp from selected agricultural wastes in Nigeria to mitigate deforestation for paper. *European Journal of Material Science*. 2022;10(1):23–36.
19. Burdon WM, Sorour MK. Institutional theory and evolution of 'a legitimate' compliance culture: The case of the UK financial service sector. *Journal of Business Ethics*. 2020;162:47–80.
20. Chandrashekar K, Jangampet VD. Risk-based alerting in SIEM enterprise security: Enhancing attack scenario monitoring through adaptive risk scoring. *International Journal of Computer Engineering and Technology (IJCET)*. 2020;11(2):75–85.
21. Chundru S. Leveraging artificial intelligence for data provenance: Enhancing tracking and verification of data lineage in FATE assessment. *International Journal of Inventions in Engineering & Science Technology*. 2021;7(1):87–104.
22. Collins A, Hamza O, Eweje A. CI/CD pipelines and BI tools for automating cloud migration in telecom core networks: A conceptual framework. *IRE Journals*. 2022;5(10):323–4.
23. Collins A, Hamza O, Eweje A. Revolutionizing edge computing in 5G networks through Kubernetes and DevOps practices. *IRE Journals*. 2022;5(7):462–3.
24. Deng A. Algorithmic collusion and algorithmic compliance: Risks and opportunities. *The Global Antitrust Institute Report on the Digital Economy*. 2020;27.
25. Edwards Q, Mallhi AK, Zhang J. The association

- between advanced maternal age at delivery and childhood obesity. *Journal of Human Biology*. 2018;30(6):e23143.
26. Egbuhuzor NS, Ajayi AJ, Akhigbe EE, Agbede OO, Ewim CPM, Ajiga DI. Cloud-based CRM systems: Revolutionizing customer engagement in the financial sector with artificial intelligence. *International Journal of Science and Research Archive*. 2021;3(1):215-234.
 27. Ezekiel OB, Akinyemi AL. Utilisation of artificial intelligence in education: The perception of University of Ibadan lecturers. *Journal of Global Research in Education and Social Science*. 2022;16(5):32-40.
 28. Faith DO. A review of the effect of pricing strategies on the purchase of consumer goods. *International Journal of Research in Management, Science & Technology*. 2018;2:E-ISSN: 2321-3264.
 29. Famaye T, Akinyemi AI, Aremu A. Effects of computer animation on students' learning outcomes in four core subjects in basic education in Abuja, Nigeria. *African Journal of Educational Research*. 2020;22(1):70-84.
 30. Hakim M. Adaptive security testing methodologies for complex microservices architectures in online retail platforms. *Perspectives on Next-Generation Cloud Computing Infrastructure and Design Frameworks*. 2020;4(10):1-7.
 31. Hamdani SWA, Abbas H, Janjua AR, Shahid WB, Amjad MF, Malik J, *et al*. Cybersecurity standards in the context of operating system: Practical aspects, analysis, and comparisons. *ACM Computing Surveys (CSUR)*. 2021;54(3):1-36.
 32. Hassan YG, Collins A, Babatunde GO, Alabi AA, Mustapha SD. AI-driven intrusion detection and threat modeling to prevent unauthorized access in smart manufacturing networks. *Artificial Intelligence (AI)*. 2021;16.
 33. Imran S, Patel RS, Onyeaka HK, Tahir M, Madireddy S, Mainali P, *et al*. Comorbid depression and psychosis in Parkinson's disease: A report of 62,783 hospitalizations in the United States. *Cureus*. 2019;11(7).
 34. Iyabode LC. Career development and talent management in banking sector. *Texila International Journal*. 2015.
 35. James AT, Phd OKA, Ayobami AO, Adeagbo A. Raising employability bar and building entrepreneurial capacity in youth: A case study of national social investment programme in Nigeria. *Covenant Journal of Entrepreneurship*. 2019.
 36. Khurana R. Fraud detection in e-commerce payment systems: The role of predictive AI in real-time transaction security and risk management. *International Journal of Applied Machine Learning and Computational Intelligence*. 2020;10(6):1-32.
 37. Kim J, Kim J. Public enforcement of COB. Strategies of financial regulation: Divergent approaches in conduct of business regulation of mis-selling in the UK and South Korea. *Strategies of Financial Regulation*. 2020:121-196.
 38. Kolade O, Osabuohien E, Aremu A, Olanipekun KA, Osabohien R, Tunji-Olayeni P. Co-creation of entrepreneurship education: Challenges and opportunities for university, industry, and public sector collaboration in Nigeria. *The Palgrave Handbook of African Entrepreneurship*. 2021:239-265.
 39. Kolade O, Rae D, Obembe D, Woldesenbet K, editors. *The Palgrave Handbook of African Entrepreneurship*. Palgrave Macmillan; 2022.
 40. Meiring P. A framework to enhance organisational performance in large-scale, diverse infrastructure major projects. Unpublished Dissertation. 2021.
 41. Munoko I, Brown-Liburdl HL, Vasarhelyi M. The ethical implications of using artificial intelligence in auditing. *Journal of Business Ethics*. 2020;167(2):209-234.
 42. Nel G, Gerhard P, Vermeltfoort K. Voices on infrastructure. Unpublished Report. 2020.
 43. Noah GU. Interdisciplinary strategies for integrating oral health in national immune and inflammatory disease control programs. *International Journal of Computer Applications Technology and Research*. 2022;11(12):483-498.
 44. Nwabekee US, Aniebonam EE, Elumilade OO, Ogunsola OY. Predictive model for enhancing long-term customer relationships and profitability in retail and service-based industries. Unpublished Manuscript. [Date Unknown].
 45. Nwabekee US, Aniebonam EE, Elumilade OO, Ogunsola OY. Integrating digital marketing strategies with financial performance metrics to drive profitability across competitive market sectors. Unpublished Manuscript. 2021.
 46. Ogunwole O, Onukwulu EC, Sam-Bulya NJ, Joel MO, Achumie GO. Optimizing automated pipelines for real-time data processing in digital media and e-commerce. *International Journal of Multidisciplinary Research and Growth Evaluation*. 2022;3(1):112-120.
 47. Ogunwole O, Onukwulu EC, Sam-Bulya NJ, Joel MO, Ewim CP. Enhancing risk management in big data systems: A framework for secure and scalable investments. *International Journal of Multidisciplinary Comprehensive Research*. 2022;1(1):10-16.
 48. Ogunyankinnu T, Onotole EF, Osunkanmibi AA, Adeoye Y, Aipoh G, Egbemhenge J. Blockchain and AI synergies for effective supply chain management. Unpublished Manuscript. 2022.
 49. Ojika FU, Owobu WO, Abieba OA, Esan OJ, Ubamadu BC, Ifesinachi A. A conceptual framework for AI-driven digital transformation: Leveraging NLP and machine learning for enhanced data flow in retail operations. Unpublished Manuscript. 2021.
 50. Ojika FU, Owobu WO, Abieba OA, Esan OJ, Ubamadu BC, Daraojimba AI. The impact of machine learning on image processing: A conceptual model for real-time retail data analysis and model optimization. Unpublished Manuscript. 2022.
 51. Ojika FU, Owobu WO, Abieba OA, Esan OJ, Ubamadu BC, Daraojimba AI. Integrating TensorFlow with cloud-based solutions: A scalable model for real-time decision-making in AI-powered retail systems. *Journal Name Missing*. 2022.
 52. Okeke CI, Agu EE, Ejike OG, Ewim CPM, Komolafe MO. A regulatory model for standardizing financial advisory services in Nigeria. *International Journal of Frontline Research in Science and Technology*. 2022;1(2):67-82.
 53. Okeke IC, Agu EE, Ejike OG, Ewim CP, Komolafe MO. A model for foreign direct investment (FDI) promotion through standardized tax policies in Nigeria. *International Journal of Frontline Research in Science*

- and Technology. 2022;1(2):53-66.
54. Okeke IC, Agu EE, Ejike OG, Ewim CP, Komolafe MO. Developing a regulatory model for product quality assurance in Nigeria's local industries. *International Journal of Frontline Research in Multidisciplinary Studies*. 2022;1(2):54-69.
 55. Okeke IC, Agu EE, Ejike OG, Ewim CP, Komolafe MO. A model for wealth management through standardized financial advisory practices in Nigeria. *International Journal of Frontline Research in Multidisciplinary Studies*. 2022;1(2):27-39.
 56. Okeke IC, Agu EE, Ejike OG, Ewim CP, Komolafe MO. A theoretical model for standardized taxation of Nigeria's informal sector: A pathway to compliance. *International Journal of Frontline Research in Science and Technology*. 2022;1(2):83-97.
 57. Okeke IC, Agu EE, Ejike OG, Ewim CP, Komolafe MO. A conceptual framework for enhancing product standardization in Nigeria's manufacturing sector. *International Journal of Frontline Research in Multidisciplinary Studies*. 2022;1(2):1-13.
 58. Okeke IC, Agu EE, Ejike OG, Ewim CP, Komolafe MO. A service standardization model for Nigeria's healthcare system: Toward improved patient care. *International Journal of Frontline Research in Multidisciplinary Studies*. 2022;1(2):40-53.
 59. Okeke IC, Agu EE, Ejike OG, Ewim CP, Komolafe MO. A conceptual model for standardizing tax procedures in Nigeria's public and private sectors. *International Journal of Frontline Research in Multidisciplinary Studies*. 2022;1(2):14-26.
 60. Okeke IC, Agu EE, Ejike OG, Ewim CP, Komolafe MO. Modeling a national standardization policy for made-in-Nigeria products: Bridging the global competitiveness gap. *International Journal of Frontline Research in Science and Technology*. 2022;1(2):98-109.
 61. Okeke IC, Agu EE, Ejike OG, Ewim CPM, Komolafe MO. A conceptual model for financial advisory standardization: Bridging the financial literacy gap in Nigeria. *International Journal of Frontline Research in Science and Technology*. 2022;1(2):38-52.
 62. Okolie CI, Hamza O, Eweje A, Collins A, Babatunde GO, Ubamadu BC. Leveraging digital transformation and business analysis to improve healthcare provider portal. *Iconic Research and Engineering Journals*. 2021;4(10):253-257.
 63. Okolie CI, Hamza O, Eweje A, Collins A, Babatunde GO, Ubamadu BC. Implementing robotic process automation (RPA) to streamline business processes and improve operational efficiency in enterprises. *International Journal of Social Science Exceptional Research*. 2022;1(1):111-119.
 64. Okolo FC, Etukudoh EA, Ogunwole O, Osho GO, Basiru JO. Systematic review of cyber threats and resilience strategies across global supply chains and transportation networks. *Journal Name Missing*. 2021.
 65. Okolo FC, Etukudoh EA, Ogunwole O, Osho GO, Basiru JO. Advances in integrated geographic information systems and AI surveillance for real-time transportation threat monitoring. *Journal Name Missing*. 2022.
 66. Okolo FC, Etukudoh EA, Ogunwole O, Osho GO, Basiru JO. Policy-oriented framework for multi-agency data integration across national transportation and infrastructure systems. *Journal Name Missing*. 2022.
 67. Olanipekun KA. Assessment of factors influencing the development and sustainability of small-scale foundry enterprises in Nigeria: A case study of Lagos State. *Asian Journal of Social Sciences and Management Studies*. 2020;7(4):288-294.
 68. Onoja JP, Ajala OA. Innovative telecommunications strategies for bridging digital inequities: A framework for empowering underserved communities. *GSC Advanced Research and Reviews*. 2022;13(1):210-217.
 69. Onoja JP, Ajala OA, Ige AB. Harnessing artificial intelligence for transformative community development: A comprehensive framework for enhancing engagement and impact. *GSC Advanced Research and Reviews*. 2022;11(3):158-166.
 70. Onoja JP, Hamza O, Collins A, Chibunna UB, Eweje A, Daraojimba AI. Digital transformation and data governance: Strategies for regulatory compliance and secure AI-driven business operations. *Journal Name Missing*. 2021.
 71. Onotole Francis E, Ogunyankinnu T, Adeoye Y, Osunkanmibi AA, Aipoh G, Egbemhenghe J. The role of generative AI in developing new supply chain strategies: Future trends and innovations. *Journal Name Missing*. 2022.
 72. Oyeniyi LD, Igwe AN, Ofodile OC, Paul-Mikki C. Optimizing risk management frameworks in banking: Strategies to enhance compliance and profitability amid regulatory challenges. *Journal Name Missing*. 2021.
 73. Parab AA, Mehta P, Vattikola A, Denney CK, Cherry M, Maniar RM, Kjaer J. Accelerating the adoption of eSource in clinical research: A Transcelerate point of view. *Therapeutic Innovation & Regulatory Science*. 2020;54:1141-1151.
 74. Subramanyam SV. Cloud computing and business process re-engineering in financial systems: The future of digital transformation. *International Journal of Information Technology and Management Information Systems (IJTMIS)*. 2021;12(1):126-143.
 75. Sun P, Doh JP, Rajwani T, Siegel D. Navigating cross-border institutional complexity: A review and assessment of multinational nonmarket strategy research. *Journal of International Business Studies*. 2021;52(9):1818.