Original Research Article

Cybersecurity Risk Exposure and Corporate Reputation in Digital-Driven Firms

Abstract.

The rapid adoption of digital technologies has transformed organizational operations, but it has also increased exposure to cybersecurity risks that can undermine corporate reputation. This study investigates the effect of external cybersecurity threats and internal cybersecurity vulnerabilities on the corporate reputation of digital-driven firms in Nigeria**.** Guided by the Situational Crisis Communication Theory, the study employed a descriptive research design and collected data through a structured questionnaire administered to 397 employees and management staff across selected digital-driven firms. The data were analyzed using descriptive statistics and multiple linear regression**.** Findings indicate that both external threats, such as phishing, malware, and ransomware, and internal vulnerabilities, including employee negligence, weak authentication policies, and inadequate training, have a significant positive effect on corporate reputation ($\beta\_EXT = 0.689$, $\beta\_INT = 0.667$, $p < 0.05$). The regression model explains 87.9% of the variance in corporate reputation, demonstrating that firms exposed to higher cybersecurity risks experience greater reputational challenges. The study concludes that effective management of both internal and external cybersecurity risks is critical for preserving stakeholder trust, brand image, and organizational credibility in digital-driven environments. Based on the findings, the study recommends the implementation of advanced cybersecurity technologies, continuous employee training, and robust internal controls to mitigate reputational damage. This research contributes to the literature by providing empirical evidence on the dual impact of cybersecurity risks on corporate reputation and offers actionable insights for digital-driven firms operating in developing-country contexts.

Keywords: Cybersecurity, External Threats, Internal Vulnerabilities, Corporate Reputation, Digital-Driven Firms,

Introduction.

In the era of digital transformation, organizations increasingly depend on advanced information systems and networked technologies to support core operations, customer engagement, and strategic decision-making (Al-Marri et al., 2023). Digital-driven firms those whose products, services, and value chains are deeply rooted in digital infrastructures derive competitive advantage from real-time data access, cloud computing, and interconnected platforms. However, the growing ubiquity of digital technologies has simultaneously expanded the attack surface for cyber adversaries, exposing firms to a wide array of external threats such as phishing, ransomware, malware, and distributed denial-of-service (DDoS) attacks (Efe et al., 2024; Hassan et al., 2025).

External cybersecurity threats represent intentional attempts by cybercriminals and hostile actors to infiltrate, disrupt, or compromise organizational systems from outside the firm. These threats exploit technical vulnerabilities as well as social weaknesses, including employee susceptibility to deception (phishing) or inadequate patching of software systems (Efe et al., 2024; Lee & Lee, 2023). In parallel, firms grapple with internal vulnerabilities manifesting as weak authentication, poor access controls,

lack of employee cybersecurity awareness, or flawed internal processes which can be equally, if not more, detrimental when exploited (Zhang et al., 2022; Singh & Sharma, 2025).

Corporate reputation, the collective perception of an organization's credibility, reliability, and ethical conduct among customers, investors, employees, and other stakeholders is now recognized as a strategic asset that is highly sensitive to cybersecurity performance (Wang & Ko, 2023; Jansen & Maier, 2025). Research indicates that firms experiencing cyber incidents frequently suffer reputational consequences, as stakeholders question the organization's ability to protect sensitive information and sustain operational integrity (Khan et al., 2023; Mbogo & Omwenga, 2024). A compromised reputation can lead to decreased customer trust, investor sell-offs, regulatory scrutiny, and long-term market disadvantage, often eclipsing direct financial costs associated with cyber incidents (Peterson & Carbone, 2022; Arif et al., 2025).

Despite the proliferation of cybersecurity studies, several gaps remain. First, research has primarily addressed external threats in isolation focusing on their technical mechanics or statistical incidence without adequately examining their reputational implications for firms operating in highly digital contexts (Shah & Kazi, 2024). Second, while some studies acknowledge the role of internal vulnerabilities, they frequently treat these as background factors in technical risk profiling rather than as reputational risk drivers (Gupta & Raghav, 2023; Le et al., 2025). This bifurcation in the literature diminishes understanding of how combined cybersecurity risk exposure encompassing both external threats and internal weaknesses influences corporate reputation in an integrated manner. Furthermore, much of the existing evidence is drawn from developed economies with robust regulatory frameworks and mature cybersecurity practices, limiting its applicability to emerging markets where digital infrastructures may be less resilient and governance structures less mature (Nwankwo et al., 2024; Adekunle & Adebayo, 2025). As digital-driven firms expand within such contexts, a localized empirical examination of cybersecurity risk exposure and reputation becomes critical.

Addressing this empirical and conceptual gap is vital because corporate reputation has become both a measure of stakeholder trust and a determinant of competitive sustainability in the digital age. Understanding the dual influence of external cybersecurity threats and internal vulnerabilities on reputation not only contributes to academic theory but also informs managerial strategy, risk governance, and policy formulation. Therefore, this study investigates the impact of cybersecurity risk exposure on corporate reputation in digital-driven firms, offering evidence to guide cybersecurity investments and reputational risk mitigation strategies.

2.1 Literature Review and Conceptual Framework

2.1.1 Cybersecurity in Digital-Driven Firms

Cybersecurity is the practice of protecting digital systems, networks, software, and data from unauthorized access, attacks, or disruption (Von Solms & Van Niekerk, 2019). In digital-driven firms, which heavily rely on interconnected systems, cloud computing, big data analytics, and automated processes, cybersecurity goes beyond mere technical protection; it is a strategic organizational capability. Digital-driven firms generate, process, and store large volumes of sensitive data, including financial information, customer records, and operational intelligence. This high-value data, if compromised, can result in operational disruptions, financial loss, regulatory penalties, and irreparable reputational damage (Bada & Nurse, 2020; Smith, 2023). As firms increasingly adopt advanced digital tools to improve efficiency and service delivery, the landscape of cyber threats simultaneously

evolves. Attackers use sophisticated methods to bypass traditional security measures, including phishing schemes, ransomware, zero-day exploits, and social engineering attacks. Consequently, cybersecurity is no longer solely a technical issue managed by IT departments; it has become an enterprise-wide concern encompassing governance, strategic decision-making, compliance, and reputation management (He & Harris, 2020). Scholars argue that organizations that fail to prioritize cybersecurity as a core strategic resource are more likely to suffer reputational erosion, loss of stakeholder trust, and reduced market value (Harper, 2022).

2.1.2 External Cybersecurity Threats

External cybersecurity threats are attacks that originate outside the organization and are typically carried out by cybercriminals, hacktivists, competitors, or state actors. Common examples include phishing, ransomware, malware, denial-of-service attacks, and social engineering (Kaspersky, 2022). These threats exploit technological, human, and procedural vulnerabilities to gain unauthorized access to critical systems and data. The reputational impact of external cyberattacks can be significant. When confidential data is exposed or operations are disrupted due to an external attack, stakeholders—including customers, investors, regulators, and partners—may perceive the organization as incompetent or incapable of protecting its digital assets (Al-Smadi, 2020). Several studies have highlighted that the public perception of organizational resilience and reliability diminishes sharply following high-profile cyber incidents, affecting brand image and stakeholder confidence (Martin, Borah & Palmatier, 2017; Karanja & Rosso, 2021). Furthermore, external cyber threats can lead to cascading effects, including negative media attention, client attrition, regulatory sanctions, and financial penalties, all of which cumulatively damage corporate reputation.

2.1.3 Internal Cybersecurity Vulnerabilities

Internal cybersecurity vulnerabilities arise from weaknesses within an organization's processes, systems, or workforce. These include inadequate access controls, weak password policies, misconfigured systems, insufficient employee training, and intentional or unintentional insider threats (Greitzer & Frincke, 2019). Research shows that a substantial portion of cybersecurity breaches originate from internal lapses, often with more severe reputational consequences than external attacks because stakeholders attribute internal failures to managerial negligence or lack of governance (Sommestad, Hallberg & Ekstedt, 2020). Internal vulnerabilities are particularly critical in digital-driven firms because employees often have privileged access to sensitive systems and data. Even minor lapses, such as falling for phishing scams, mismanaging credentials, or failing to follow established cybersecurity protocols, can compromise operational integrity and data security (Chen & Roberts, 2021). The reputational damage arising from internal vulnerabilities can persist long after the incident, affecting client trust, investor confidence, and market perception. Organizations that invest in comprehensive internal security measures, continuous employee training, and strong governance structures are better able to mitigate reputational risk associated with insider vulnerabilities (Lopez & Turner, 2023).

2.1.4 Corporate Reputation

Corporate reputation is the collective assessment of an organization's ability to deliver on its promises, uphold ethical standards, demonstrate reliability, and meet stakeholder expectations over time (Fombrun & Van Riel, 2004). It is an intangible but strategic organizational asset that significantly

influences customer loyalty, investor confidence, employee engagement, and long-term competitive advantage (Walker, 2010).

In the context of digital-driven firms, corporate reputation is tightly coupled with perceptions of cybersecurity competence. Stakeholders expect firms to proactively secure their digital assets and maintain uninterrupted service delivery. Any failure, whether due to external attacks or internal vulnerabilities, signals organizational weakness and can erode trust. Studies indicate that firms experiencing data breaches or operational disruptions often face long-term reputational damage, resulting in loss of clients, reduced stock prices, and increased regulatory scrutiny (Harper, 2022; He & Harris, 2020). Therefore, protecting corporate reputation requires not only robust technological defences but also effective internal policies, employee awareness, and crisis response strategies.

2.1.5 External Security Threat and Corporate Reputation

External cybersecurity threats, including phishing, malware, ransomware, and DDoS attacks, are increasingly pervasive in digital-driven firms and pose significant risks to data integrity and operational continuity (Bada & Nurse, 2020; Kaspersky, 2022; Smith, 2023). These threats, originating outside the organization, can compromise sensitive information and erode stakeholder trust. Empirical studies indicate that cyber incidents negatively influence corporate reputation, affecting brand image, customer loyalty, and investor confidence (Martin, Borah & Palmatier, 2017; Al-Smadi, 2020; Karanja & Rosso, 2021). The reputational impact of external threats is amplified when firms fail to respond effectively. Rapid detection, transparency, and crisis communication mitigate stakeholder concerns, whereas poor management exacerbates reputational damage (Coombs, 2007; Harper, 2022). In digital-first firms, stakeholders increasingly associate organizational reliability and governance maturity with cybersecurity competence, making effective risk management a critical determinant of reputation (He & Harris, 2020; Yeboah & Mensah, 2022).

2.1.6 Internal Security Vulnerabilities and Corporate Reputation

Internal security vulnerabilities refer to weaknesses within an organization's systems, policies, or human processes that increase exposure to cyber risks. These include employee negligence, weak access controls, inadequate cybersecurity training, misconfigured systems, and lack of internal monitoring (Greitzer & Frincke, 2019; Sommestad, Hallberg & Ekstedt, 2020; Chen & Roberts, 2021). Such vulnerabilities often stem from insufficient governance, poor security culture, and ineffective risk management frameworks. Empirical evidence suggests that internal vulnerabilities can precipitate breaches and significantly damage corporate reputation. When data loss or disruption is linked to internal failures, stakeholders often attribute responsibility to managerial incompetence or weak oversight, which undermines trust and credibility (Lee & Larsen, 2022; Lopez & Turner, 2023). Organizations with pervasive internal weaknesses tend to experience stronger negative stakeholder reactions than those whose breaches originate solely from external threats (Sommestad et al., 2020). Internal failures not only affect immediate perceptions of trustworthiness but also influence long-term evaluations of firm reliability. Research indicates that stakeholders assess internal breaches as indicators of systemic risk and governance failure, leading to sustained reputational decline (Martin, Borah & Palmatier, 2017; Harper, 2022). Firms with robust internal controls and continuous employee training demonstrate improved resilience and maintain stronger reputational capital even when incidents occur (He & Harris, 2020).

2.2 Theoretical Review

2.2.1 Situational Crisis Communication Theory (SCCT)

This research was anchored on Situation Crisis Communication Theory (SCCT). The Situational Crisis Communication Theory (SCCT), propounded by W. Timothy Coombs in **2007**, asserts that organizational crises pose threats to corporate reputation, and the degree of impact depends on stakeholders' perception of responsibility and the effectiveness of organizational response strategies. In the context of this study, cybersecurity breaches both external, such as phishing and ransomware attacks, and internal, including employee negligence and weak access controls represent crises capable of damaging the reputation of digital-driven firms. SCCT highlights that stakeholders tend to attribute internal vulnerabilities to organizational failure, while external threats may be perceived as beyond the firm's control, influencing the level of reputational blame assigned. Moreover, the theory emphasizes that timely, transparent, and effective crisis response can mitigate reputational damage, reinforcing trust and confidence among stakeholders. Thus, SCCT provides a suitable framework for this study, guiding the examination of how external cybersecurity threats and internal vulnerabilities affect corporate reputation in digital-driven firms. In line with the theory, we hypothesise that:

H_1: External cybersecurity threats have no significant effect on the corporate reputation of digital-driven firms.

H_2: Internal cybersecurity vulnerabilities have no significant effect on the corporate reputation of digital-driven firms.

2.3 Empirical Review

Martin, Borah, and Palmatier (2017) found that firms experiencing external cyberattacks suffered significant declines in stakeholder trust and public perception. Al-Smadi (2020) demonstrated that phishing and ransomware attacks undermine confidence in digital-driven firms, with brand credibility significantly affected. Karanja and Rosso (2021) observed that repeated external cyber incidents cause lasting reputational damage, leading to customer attrition and increased regulatory scrutiny. Greitzer and Frincke (2019) indicated that insider negligence contributes significantly to security breaches with severe reputational consequences. Sommestad et al. (2020) highlighted that inadequate internal security culture increases exposure to breaches, resulting in negative stakeholder perceptions. Lee and Larsen (2022) further reported that internal lapses generate stronger reputational backlash than external attacks because stakeholders attribute responsibility to organizational governance failures. Research suggests that organizations must manage both internal and external cybersecurity risks to maintain reputation. Harper (2022) concluded that neglecting internal vulnerabilities while focusing solely on external threats results in reputational erosion despite robust external defenses. Chen and Roberts (2021) emphasized that firms with integrated cybersecurity strategies addressing both internal and external risks are more resilient to reputational damage, demonstrating the criticality of a holistic approach.

2.4 Research Gap

Despite increasing scholarly attention to cybersecurity, existing studies largely examine external cyber threats or internal vulnerabilities in isolation, with limited integration of both dimensions as a unified construct of cybersecurity risk exposure (Shah & Kazi, 2024; Gupta & Raghav, 2023). Moreover, prior research has focused predominantly on technical and financial outcomes of cyber incidents, while insufficient emphasis has been placed on their reputational implications, particularly in digital-driven firms (Khan et al., 2023; Peterson & Carbone, 2022). In addition, most empirical evidence is drawn from developed economies, thereby limiting contextual relevance to emerging markets where cybersecurity structures and stakeholder expectations differ significantly (Nwankwo et al., 2024; Adekunle & Adebayo, 2025). Consequently, there remains a gap in understanding how combined cybersecurity risk exposure external threats and internal vulnerabilities affects corporate reputation, especially within digitally intensive firms in developing contexts.

3.0 Methodology

This study adopts a descriptive research design, which is suitable for providing a systematic, factual, and accurate description of the relationship between cybersecurity risks and corporate reputation. Descriptive research allows the researcher to observe, measure and analyze phenomena without manipulating variables (Aaker, Kumar & Day, 2013).The descriptive design is appropriate because it enables the study to examine the extent and characteristics of external cybersecurity threats and internal vulnerabilities in digital-driven firms It allows the researcher to assess how these cyber risks influence corporate reputation as perceived by stakeholders.

The population of this study comprises employees and management staff of accounting firms, fintech companies, and other digital-driven organizations in Nigeria. Due to the absence of a centralized database, the population is estimated using industry statistics from the National Information Technology Development Agency (NITDA) and related reports on Nigeria's digital ecosystem. Based on these sources, the study adopts an estimated population size of 50,000 personnel, which serves as the basis for sample size determination. The sample size for this study was determined using Taro Yamane formula for finite population, applying a 5% margin of error to achieve representativeness. The formula is express as:

Formula

n= N}/ {1 + N (e)^2}
Where:

n = Sample size

N = Total population size

e = Level of significance (margin of error), usually 0.05 (5%)

n= 50,000/1+ 50,000(0.05) ^2 = Sample size 397

The sample size was considered adequate to provide reliable and representative data for statistical analysis. This study adopts a stratified random sampling technique. The population was first categorized into strata based on firm type, namely accounting firms, fintech companies, and other digital-driven organizations. This stratification ensures that all relevant segments of the digital

ecosystem are adequately represented in the study. Subsequently, a simple random sampling method was applied within each stratum to select respondents. This approach minimizes selection bias and enhances the representativeness and generalizability of the findings, as respondents are drawn proportionately from each category of firms.

Data for this study were collected through a structured questionnaire administered to selected respondents across accounting firms, fintech companies, and other digital-driven organizations in Nigeria. The questionnaire was designed using a five-point Likert scale to capture respondents' perceptions on external cybersecurity threats, internal vulnerabilities, and corporate reputation. The instrument was distributed both physically and electronically, and respondents were given adequate time to complete it. This method was adopted due to its efficiency in gathering standardized data from a large sample, thereby enhancing the reliability and consistency of the responses. The validity of the research instrument was established through content and face validity. The questionnaire was reviewed by experts in cybersecurity and management to ensure that the items adequately captured the constructs of external cybersecurity threats, internal vulnerabilities, and corporate reputation. Their suggestions were incorporated to improve clarity, relevance, and coverage of the variables. The reliability of the instrument was assessed using Cronbach's Alpha coefficient after a pilot test. The results indicated that all constructs recorded alpha values above the acceptable threshold of 0.70, confirming a high level of internal consistency. This demonstrates that the instrument was reliable for measuring the variables of the study. Multiple regression analysis was employed to test the effect of external threats and internal vulnerabilities on corporate reputation. The regression model is specified as:

$$CR = \beta 0 + \beta 1EXT + \beta 2INT + \epsilon$$

Where:

CR = Corporate Reputation (dependent variable)

EXT = External Cybersecurity Threats

INT = Internal Cybersecurity Vulnerabilities

$\beta 0$ = Constant

$\beta 1$, $\beta 2$ = Coefficients of independent variables

$\boldsymbol{\varepsilon}$ = Error term

4.0 Data Analysis

4.1 Descriptive Analysis

Table.1: Questionnaire and Response

S/N	External Security Threats	SD	D	N	A	SA
EST1	External attacks such as phishing, malware, and ransomware affect our organization.	21	23	48	168	137

EST2	Cyber incidents from outside parties reduce stakeholder confidence.	21	19	37	155	165
EST3	External threats are increasingly sophisticated and frequent.	19	22	44	164	148
EST4	Negative media exposure from cyberattacks impacts our reputation.	19	18	32	148	183
EST5	External cyberattacks have increased over the past two years	18	20	45	164	150
	Internal Security Vulnerabilities					
ISV1	Employee negligence contributes to cybersecurity breaches.	21	22	45	163	146
ISV2	Weak internal controls increase vulnerability to cyberattacks.	20	20	33	149	175
ISV3	Misconfigured systems or improper access controls compromise data security.	18	20	53	172	134
ISV4	Inadequate cybersecurity training leads to reputational risks.	21	17	24	142	193
ISV5	Staff training on cybersecurity best practices is insufficient	18	20	38	155	166
	Corporate Reputation					
CR1	Stakeholders trust the organization to protect digital information.	16	20	46	163	152
CR2	Cybersecurity incidents negatively affect brand image.	17	20	34	150	176
CR3	Organizational credibility is influenced by the management of cyber risks.	19	18	20	118	222
CR4	Corporate reputation impacts client retention and investor confidence.	18	19	22	138	200
CR5	Strong cybersecurity practices enhance the organization's corporate reputation	18	18	20	94	247

Source: Survey (2026)

	Mean	Std. Deviation	N
CR	4.2025	.97509	397
EST	4.0413	1.00076	397
ISV	4.0650	.98745	397

Source: SPSS v. 26 output (2026)

Table.1 presents the descriptive statistics for the study variables. Corporate Reputation, the dependent variable, recorded a mean score of 4.20, indicating that respondents generally perceive the reputation of their organizations as strong and influenced by cybersecurity practices. External Security Threats had a mean of 4.04, reflecting respondents' recognition of the prevalence and impact of external cyber risks, such as phishing, malware, and ransomware, on organizational operations and stakeholder trust. Internal Security Vulnerabilities showed a mean of 4.07, suggesting that respondents acknowledge

internal weaknesses including employee negligence, inadequate access controls, and insufficient cybersecurity awareness as significant factors affecting organizational security and reputation.

4.2 Test of Hypothesis

4.2.1 Test of Hypothesis 1

H_1: External cybersecurity threats have no significant effect on the corporate reputation of digital-driven firms.

Table 2 Regression Results: Effect of External Cybersecurity Threats on Corporate Reputation of Digital-Driven Firms

Model Summary	R Square	0.499	
ANOVA	F	394.029	
	Sig.	0.000	
Coefficients	**B**	**T**	**Sig**
Constant	1.420	9.833	0.000
External Cybersecurity Threats	0.689	19.850	0.000

Source: SPSS v. 26 output (2026)

Table 2 shows the regression results on the effect of external security threats on corporate reputation of digital-driven firms. The R^2 value of 0.499 indicates that 49.9% of variations in corporate reputation of digital-driven firms are explained by external security threats. The F-statistic of 394.029 with a significance of 0.000 validates the overall model at 5%. The coefficient for external security threats ($\beta = 0.689$, $p < 0.05$) reflects a positive marginal effect, implying that for every one-unit increase in external security threats, the corporate reputation of digital-driven firms increases by 0.689 units, holding all other factors constant, and this effect is significant. Hence, the null hypothesis is rejected, establishing that external security threats significantly and positively influences corporate reputation of digital-driven firms.

4.2.2 Test of Hypothesis 11

H_2: Internal cybersecurity vulnerabilities have no significant effect on the corporate reputation of digital-driven firms.

Table 3 Regression Results: Effect of Internal Security Vulnerabilities on the Corporate Reputation of Digital-Driven Firms

Model Summary	R Square	0.457	
ANOVA	F	332.327	
	Sig.	0.000	
Coefficients	**B**	**T**	**Sig**
Constant	1.489	9.723	0.000
Internal Security Vulnerabilities	0.667	18.230	0.001

Source: SPSS v. 26 output (2026)

Table 3 shows the regression results on the effect of internal security vulnerabilities on corporate reputation of digital-driven firms. The R^2 value of 0.457 indicates that 45.7% of variations in

corporate reputation of digital-driven firms are explained by internal security vulnerabilities. The F-statistic of 332. 327 with a significance of 0.000 validates the overall model at 5%. The coefficient for internal security vulnerabilities ($\beta = 0.667$, $p < 0.05$) reflects a positive marginal effect, implying that for every one-unit increase in internal security vulnerabilities the corporate reputation of digital-driven firms increases by 0.667 units, holding all other factors constant, and this effect is significant. Hence, the null hypothesis is rejected, establishing that internal security vulnerabilities significantly and positively influences corporate reputation of digital-driven firms.

4.3 Discussion of Findings

The study examined the effect of external security threats **and** internal security vulnerabilities on the corporate reputation of digital-driven firms. Regression results indicate that both external threats ($\beta = 0.689$, $p < 0.05$) and internal vulnerabilities ($\beta = 0.667$, $p < 0.05$) significantly influence corporate reputation.

The significant effect of external security threats suggests that cyberattacks such as phishing, malware, and ransomware negatively affect stakeholder trust and public perception (Efe et al., 2024; Wang & Ko, 2023; Mbogo & Omwenga, 2024; Arif et al., 2025). Similarly, internal vulnerabilities, including weak access controls, poor employee awareness, and inadequate internal policies, significantly impair reputation, as stakeholders interpret these lapses as governance failures (Lee & Larsen, 2022; Zhang et al., 2022; Singh & Sharma, 2025; Gupta & Raghav, 2023).

The slightly higher coefficient for external threats indicates that stakeholders may perceive these incidents as more visible and publicly damaging, though internal vulnerabilities remain highly influential. Overall, the findings confirm that corporate reputation in digital-driven firms is jointly shaped by external and internal cybersecurity risks, highlighting the need for comprehensive risk management strategies that combine technological defenses, internal controls, and employee awareness (Shah & Kazi, 2024; Peterson & Carbone, 2022; Jansen & Maier, 2025).

5.0 Conclusion and Recommendations

5.1 Conclusion

This study examined the effect of cybersecurity risk exposure captured through external security threats and internal security vulnerabilities on the corporate reputation of digital-driven firms. The findings demonstrate that both dimensions of cybersecurity risk significantly influence corporate reputation, confirming that organizations operating in digitally intensive environments are highly vulnerable to reputational damage arising from cyber incidents. The study concludes that external threats, such as phishing, ransomware, and malware attacks, alongside internal weaknesses including inadequate controls, poor cybersecurity awareness, and system vulnerabilities, collectively shape stakeholder perceptions of organizational credibility and trustworthiness. While external threats tend to attract greater public attention, internal vulnerabilities signal deeper governance and managerial deficiencies, making both critical determinants of reputational outcomes.

5.2 Policy Recommendations

(1) Regulatory authorities should develop and enforce comprehensive cybersecurity policies and compliance standards for digital-driven firms.

(2) Organizations should prioritize continuous investment in advanced cybersecurity technologies such as intrusion detection systems, encryption protocols, and threat intelligence platforms to mitigate external attacks.

5.3 Limitations of the Study

This study is subject to certain limitations that should be acknowledged. First, the study relied on primary data collected through a structured questionnaire, which is subject to respondents' biases, perceptions, and possible inaccuracies in self-reporting. Second, the scope of the study was limited to selected digital-driven firms, which may restrict the generalizability of the findings to all organizations within Nigeria or other contexts. Third, the use of a cross-sectional research design limits the ability to capture changes in cybersecurity risk exposure and corporate reputation over time.

5.4 Areas for Further Studies

(1) Future studies should consider adopting a longitudinal research design to examine how cybersecurity risk exposure and corporate reputation evolve over time.

(2) In addition, comparative studies across different industries or countries are recommended to assess contextual differences in cybersecurity practices and reputational outcomes.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

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