



Global Scientific and Academic Research Journal of Economics, Business and Management

ISSN: 2583-5645 (Online)

Frequency: Monthly

Published By GSAR Publishers

Journal Homepage Link- <https://gsarpublishers.com/journals-gsarjebm-home/>



From Protection to Prosperity: How Information Security Management Drives Sustainability in Manufacturing Companies in Rivers State

By

Chizi Ernuchi Obara, PhD

Department of Office and Information Management, Faculty of Administration and Management, Rivers State University, Port Harcourt, Nigeria



Article History

Received: 25/06/2025

Accepted: 05/07/2025

Published: 07/07/2025

Vol –4 Issue – 7

PP: -17-23

Abstract

Information security management plays a critical role in enhancing organizational efficiency, reducing operational costs, and enabling effective communication with stakeholders. Its primary objectives include safeguarding information from unauthorized access, loss, or destruction, while promoting reuse and continuous development. This study investigates the relationship between information security management, specifically internal document management and the sustainability of manufacturing firms in Rivers State, Nigeria. Sustainability was measured through indicators of growth and profitability. A total of 78 managerial staff from 26 manufacturing firms participated in the study, with data collected via structured questionnaires. The study addressed two research questions and tested two hypotheses using Pearson's product moment correlation, analyzed through SPSS version 23.0. Findings revealed a statistically significant and positive relationship between internal document management and sustainability. The study concludes that effective internal document management enhances the long-term sustainability of manufacturing firms by promoting operational resilience and adaptability. It recommends that firms transition from fragmented or manual documentation processes to integrated systems utilizing digital archiving, document management software, and cloud-based platforms to improve security, accessibility, and organizational performance.

Keywords: Information security, Management, Sustainability, Manufacturing firms, Growth, Profitability

INTRODUCTION

Recently, companies have dedicated substantial efforts toward establishing and enhancing information security systems to ensure that information is adequately stored and preserved (Sarita & Paul, 2020). As stated by the International Federation of Data Organizations for Social Science (2012), information security serves to safeguard and uphold both the security and integrity of information. This is achieved through a series of structured activities governed by established policies, regulations, and strategies aimed at maintaining and extending the lifespan and reliability of information and its associated metadata.

The objectives of information security include, but are not limited to, protecting information from unauthorized access, loss, or destruction, and promoting its reuse and further development. The concept of information security goes beyond mere ownership of data or the creation of backup

copies. It ensures consistent and reliable access to information by incorporating systems for backup and recovery in anticipation of disasters or technological transitions (Kennedy, 2020). Information security management involves developing effective practices that maintain access to usable data, verify outcomes, and ensure that the information can be reused in the future. This process entails the collection, analysis, integration, storage, and protection of relevant information, enabling its discovery and use for future reference (Blessing, 2015).

Furthermore, information security management focuses on identifying and applying strategies and practices that enhance efficiency and agility, reduce costs, implement incremental improvements, and facilitate the clear communication of insights to stakeholders and investors (Khan & Ejike, 2017). The core aim of information security is to combat risks such as the inability to identify where information is stored or the



lack of sustainable hardware, software, or technical support that may render the information inaccessible (Giaretti, 2011).

Currently, manufacturing firms face increasing risks due to the advanced technological capabilities of fraudsters attempting to infiltrate organizational information systems with the intent to steal and defraud both the firms and their customers. As a result, there is a growing need to improve information security systems to ensure that assets are properly stored, secured, and protected, thereby enabling continued business success. Information security must be capable of identifying potential sources or entry points for unauthorized access, thereby adopting a proactive stance. The loss of vital information must not be tolerated and should be preventable (Tantua Jnr. & James, 2019).

According to Singh (2009), protecting sensitive and relevant information requires adherence to key elements of what he refers to as the information security triad. One critical component of this triad is encryption. Encryption ensures that unauthorized individuals or systems cannot access or interpret confidential information. For instance, during online credit card transactions, encryption is used to secure card numbers during transmission. Additionally, encryption restricts the visibility of card numbers in databases, log files, backups, and printed receipts, as well as limits access to any locations where this data may appear.

Efforts to implement security should not be reactionary or delayed until after a breach has occurred. Instead, **encryption and other preventive measures must be proactively established** to safeguard data. Although encryption alone does not fully ensure security, it is a **crucial step** in protecting the **privacy of individuals whose personal information is stored** within an organization's information system (Xuemei, Yan, & Lixing, 2009).

Sustainability issues within the manufacturing sector are becoming increasingly critical, especially in Rivers State, Nigeria, where the industry has faced a heightened risk of decline over the past decade. A major contributor to this challenge is the inability to effectively manage information security systems. Many of these companies have historically neglected the importance of securing information through adequate internal document and data management practices. This oversight, accumulated over time, has hindered organizational growth, threatened sustainability, and in some cases, contributed to organizational failure.

In response to these issues, this research aims to address the identified problem through a focus on information security management. The topic has attracted significant scholarly attention, with many researchers emphasizing that organizations are frequently confronted with competing threats, particularly from external sources such as hackers and malicious actors. Such threats can severely disrupt operations, impact core business functions, and reduce overall productivity.

Given this context, it has become essential for organizations—especially manufacturing firms in Rivers

State—to recognize the critical importance of managing information security. Proper oversight of sensitive information thresholds not only helps prevent external breaches but also contributes to the development of a resilient and sustainable organizational structure capable of withstanding evolving technological and security challenges.

Against this backdrop, the present study seeks to investigate the relationship between information security management and organizational sustainability within manufacturing firms in Rivers State, Nigeria.

This study conceptualized the following framework as a guide through the study.

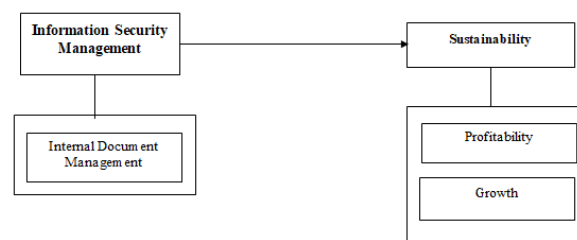


Fig. 1.1: Framework of Information security management and Sustainability of Manufacturing firms in Rivers State, Nigeria.

Source: Researcher's Conceptualization, 2023

LITERATURE REVIEW

Theoretical Framework

This study is grounded in the Information Continuum Model, which serves as the foundational theory for Information Security Management. Originating from Australian Standard 4390, the information continuum is described as a consistent and coherent process that manages information from its pre-creation (during the design of systems of record) through to its retention and eventual use. Key figures associated with the development of this model include Jay Atherton, Ian MacLean, and Frank Upward. The term “continuum” was first linked to Australia's National Archivist Ian MacLean in the 1950s, who argued that the roles of data custodians and archivists are not distinct, emphasizing the unified responsibility of an information custodian. His perspective prompted a deeper exploration of the connection between archival science and information security management. While Atherton was the first to articulate the information continuum model in the mid-1980s, MacLean is credited with introducing the term itself. This study adopts a sequential framework aligned with the continuum perspective, treating datasets as integral components of a business process that begins with creation and spans their entire lifecycle until utilization (Shepherd & Yeo, 2003), with information security management positioned as a critical layer within the broader scope of data management.

The limitations of the traditional information life cycle theory, coupled with the rapid growth of digital information, led to the development and adoption of the Information Continuum Model (An, 2001; Flynn, 2001; Upward, 2000). Prominent theorists such as Frank Upward, Sue McKemmish, Barbara Reed, and Don Schauder introduced this model in response to

the evolving electronic information needs of the 1990s, offering a more dynamic and integrated alternative to the linear life cycle approach (Chachage, 2005; Flynn, 2001). According to Xiaomi (2003), the formulation of the Record Continuum Model was grounded in four core principles: first, it embraces a broad concept of “record” that includes information of enduring value—whether used for transactional, evidentiary, or memory purposes—and unifies archiving and recordkeeping regardless of duration; second, it emphasizes the logical nature of information over its physical form, applicable to both paper and electronic formats; third, it calls for the institutionalization of the recordkeeping profession by embedding recordkeeping into broader business and societal processes; and fourth, it establishes archival science as the foundation for organizing knowledge in the field, allowing for continual revision and application across past, present, and future contexts.

Theorists such as Kennedy and Schauder (1999), and Shepherd and Yeo (2003), emphasized the importance of collaboration between information professionals and information systems experts in the design of the Record Continuum Model. This inclusive approach enables both archivists and systems designers to participate from the point of information creation, ensuring that systems are designed to manage and preserve information effectively and maintain its integrity throughout its existence. Unlike the traditional life cycle model, the continuum model acknowledges that information retains value even after it becomes non-current. As such, the active involvement of archivists and archive managers plays a critical role in ensuring the long-term preservation and accessibility of information (Chachage & Ngulube, 2006).

Information Security Management

Banach and Li (2011) argue that managing information security has become increasingly challenging due to the evolving nature of digital technology and the growing number of threats it poses to digital information. Conway (1996) highlighted a key issue of the digital age, noting that while our capacity to collect information has expanded, the longevity of the storage media has diminished significantly. In contrast, Lavoie and Dempsey (2004) emphasized a shift in the focus of information security management, from the reactive recovery of compromised information to proactive protection and long-term preservation. They assert that effective management of digital records requires the application of digital legacy practices throughout the entire record lifecycle. Moreover, they stress that information security is most effective when integrated early in the process, as restoration of damaged or obsolete digital assets is often not feasible or financially viable.

Growing awareness of the urgency in securing information has driven the development of various methods aimed at addressing the challenges of long-term digital storage. According to Becker et al. (2009), current approaches generally fall into categories such as digital backup, storage, encryption, and hybrid systems. However, they caution that these solutions often struggle with interoperability issues, the

complexity of mixed software products, and the demands of managing large data sets. In response, there has been a shift towards open-source technologies to enhance long-term accessibility and reduce vendor lock-in. As technology continues to evolve, many organizations find it increasingly difficult to manage their storage infrastructures without relying on advanced technological solutions. Yet, while technology is essential for effective information security management, it also introduces vulnerabilities and risks to organizational databases. Consequently, information security management has become critical for ensuring operational efficiency and effectiveness, with Lanre and Toke (2000) emphasizing its importance for every organization.

Information security management has emerged as a vital management tool for achieving operational efficiency and effectiveness. The concept of securing information is as old as humanity itself, tracing back to when information was stored in human memory and communicated verbally. As societies evolved, more permanent methods such as engraving on stone tablets, scrolls, and walls were introduced to preserve valuable information for future reference. However, these early systems were limited in reliability and longevity, highlighting the enduring challenge of information preservation. This historical context underscores the growing concern and focus on modern information security management, especially as the volume and sensitivity of information continue to increase in today's digital age.

Internal Document Management

According to Indianapolis (1996), as cited in Ragimova, Abdullayev, and Abbasova (2020), document management and project management are closely interconnected, particularly in information-intensive projects. The outcome of such projects typically includes a set of documents that describe the developed product, the processes involved, or the final deliverables. By identifying the documents required at each stage, both for output and intermediate steps, organizations can effectively track project progress through a document management system. These systems have been established to receive, process, and transmit information (Parkhomov, 2012), and gained significant traction in the 1980s and 1990s (Wei et al., 2002) as essential tools for organizational efficiency.

In the digital age, the production and utilization of documents have been fundamentally transformed. Ragimova et al. (2020), note that modern enterprises depend on automated and secure solutions to manage information effectively, ensuring both accessibility and integrity. A document management system (DMS) is now commonly used to track and store electronic documents or scanned versions of physical ones. This concept overlaps with content management systems and forms part of broader enterprise content management frameworks, including digital asset and records management systems (Parkhomov, 2012). Traditionally, a document referred to a physical medium, such as a memo or letter containing written or visual information for specific purposes (Efremova, 2019). However, with advancements in information technology, the definition has evolved. Today,

most documents are digital files processed through operational and email systems, marking a significant shift in how information is stored, accessed, and understood in the business world (Efremova, 2019; Pakhomov, 2012).

Sustainability

Organizations today face growing pressure to align their business strategies with societal expectations, addressing the concerns of consumers, employees, and other stakeholders while also seeking competitive advantage (Bielak, Bonini, & Oppenheim, 2007; Bonini, Mendonça, & Oppenheim, 2006). Understanding sustainable organizational practices requires a clear definition of the concept, which often varies in interpretation. Generally, sustainable organizations are understood to be those that operate in an economically viable, socially responsible, and environmentally conscious manner (Beal et al., 2017; KPMG, 2011; Daoud & Menghwar, 2017; Bocken et al., 2014; Clarke & Roome, 1999). From a business standpoint, organizations must manage both internal and external factors: internal aspects such as management and operations are under direct control, while external aspects like customer loyalty indirectly influence outcomes such as revenue (Harianto & Sari, 2021; Muhamad & Rilvani, 2021). Effective and strategic management of both dimensions is essential for sustained growth.

Sustainability, often associated with the concept of sustainable development, is defined by the Brundtland Report (1987) as meeting present needs without compromising the ability of future generations to meet theirs. This approach integrates environmental, social, and economic considerations and aims to reconcile the tension between economic growth and environmental protection. Organizations have a responsibility to use natural resources in ways that preserve them for future use rather than deplete or permanently damage them (Garcia, 2022). Today, corporate sustainability involves embedding sustainable development goals into operational practices (De Carvalho et al., 2019), and is reflected in a company's competencies across social, environmental, and economic domains such as social welfare management, the five Rs of environmental sustainability (repair, redesign, recycle, reuse, reduce), and innovation-driven economic strategies (Wong & Ngai, 2021). Sustainable organizational management must address stakeholder needs across all dimensions, guided by stakeholder theory, which links business success with strong societal engagement. By fostering sustainable relationships with both internal and external stakeholders, companies can develop a shared vision and achieve long-term sustainability goals (Garcia, 2022).

Growth

The key to a company's survival in today's dynamic global business environment lies in its ability to achieve sustainable business growth. Business growth is widely recognized as a critical indicator of a business unit's success, reflecting its overall performance alongside factors such as size, operational efficiency, liquidity, debt levels, inflation, exchange rates, economic growth, and interest rates (Musah et al., 2019). Gupta et al. (2013) define business growth through revenue generation, value creation, and expansion of business

volume, while Owolabi and Ogan (2022) similarly describe it as the process of increasing success through profitability and scale. Business growth is commonly measured using both absolute and relative changes in key metrics such as sales, assets, employment, productivity, and profit margins. Several factors influence growth, including a company's history, entrepreneur characteristics, regulatory frameworks, and geographic context (Gupta et al., 2013), as well as firm-specific variables like past growth, size, financial constraints, capital intensity, operational efficiency, and vertical integration (Aregbeyen, 2012).

Zhuo and Wit (2009) categorize the determinants of business growth into three major dimensions: individual, organizational, and environmental. Individual determinants refer to the personal qualities and decisions of entrepreneurs, including their motivation, risk-taking ability, self-efficacy, and background. Organizational determinants encompass internal factors such as the firm's age, size, strategic direction, financial and human resources, structural design, and adaptive capabilities. Environmental determinants, on the other hand, involve external conditions such as market dynamism, technological changes, competitive hostility, environmental complexity, and supportive factors like market potential. Together, these three dimensions interact to shape the trajectory of a company's growth, emphasizing the multifaceted and interconnected nature of sustainable business development.

Profitability

Profitability has become a crucial objective for companies striving to remain competitive and ensure long-term survival, especially in industries with intense market rivalry. It is a fundamental prerequisite for achieving broader financial goals and is widely regarded as a key measure of corporate performance (Gitman & Zutter, 2012). Profitability reflects a company's ability to generate income over a specified period, influenced by factors such as sales volume, asset utilization, and capital structure (Margaretta & Spartica, 2016). Consequently, the pursuit and enhancement of profitability have become central themes in academic and professional discourse across fields like economics, finance, accounting, and management. Profitable companies tend to add value to the economy by fostering innovation, attracting and retaining talent, engaging in social responsibility, and contributing to public revenue through taxation. Their strong performance directly supports income generation and broader economic development (Olutunla & Obamuyi, 2008; Lazar, 2016). This has led researchers to explore, through increasingly sophisticated models, the various firm-level and industry-level determinants that impact profitability (Al-Jafari & Al-Samman, 2015; Pratheepan, 2014).

Beyond being a performance metric, profitability is essential for sustaining business growth, as it provides the financial resources necessary for reinvestment and expansion. Growth in profitability can be measured using indicators such as net profit margin or return on equity. From an entrepreneurial perspective, if entrepreneurship is defined as the creation of rent through innovation (Stewart, 1991), and rent as above-

average earnings compared to competitors (Norton, 2002), then profitability becomes a vital marker of entrepreneurial success. This underscores the idea that financial success is a prerequisite for high-performing firms. However, Delmar et al. (2003) present an alternative view, suggesting that while profits are important, their significance relative to the scale of operations can only be accurately assessed over time—either across entire industries or within specific firms. This nuanced understanding highlights the dynamic relationship between profitability, performance, and sustainable growth.

METHODS

This descriptive study employed a cross-sectional survey design and focused on 26 manufacturing firms in Rivers State. The target population included three managers (top, senior, and junior) from each firm, totaling 78 respondents. Data was collected using a structured, close-ended 4-point Likert scale questionnaire, primarily administered to top and senior managers. The reliability of the questionnaire was confirmed through a test-retest method and a Cronbach's Alpha coefficient of 0.7. Pearson's Product Moment Correlation was used for hypothesis testing at the secondary analysis level, with all analyses conducted using SPSS version 23.0.

DATA ANALYSIS AND RESULTS

Decision rule

Reject H_0 if $PV < 0.05$

Accept H_0 if $PV > 0.05$

Table 1 Showing Strength and Direction of Relationship between Variables

Range of values	Degree of relationship
$\pm 0.00 - \pm 0.19$	Very weak
$\pm 0.20 - \pm 0.39$	Weak
$\pm 0.40 - \pm 0.59$	Moderate
$\pm 0.60 - \pm 0.79$	Strong
$\pm 0.80 - \pm 1.00$	Very strong

Test of Hypotheses

H₀₁: There is no significant relationship between internal document management and growth in manufacturing firms in Rivers State

Table 2 Relationship between Internal document management and Growth

		Internal document management	Growth
Internal document management	Pearson Correlation	1	.758**
	Sig. (2-tailed)		.000
	N	53	53
Growth	Pearson Correlation	.758**	1

Sig. (2-tailed)	.000	
N	73	73

** . Correlation is significant at the 0.01 level (2-tailed).

The SPSS output in Table 2 reveals a correlation coefficient of **0.758** between internal document management and growth, indicating a strong and positive relationship. Additionally, the **p-value of 0.000** is less than the significance level of 0.05, confirming that the relationship is statistically significant. This suggests that improvements in internal document management contribute significantly to the growth of manufacturing firms in Rivers State, with other growth factors attributed to external influences. Consequently, the null hypothesis stating there is no significant relationship between internal document management and growth is rejected, and the alternative hypothesis is accepted—affirming a strong, significant relationship between the two variables.

H₀₂: There is no significant relationship between internal document management and profitability in manufacturing firms in Rivers State

Table 3 Relationship between Internal document management and Profitability

		Internal document management	Profitability
Internal document management	Pearson Correlation	1	.793**
	Sig. (2-tailed)		.000
	N	53	53
Profitability	Pearson Correlation	.793**	1
	Sig. (2-tailed)	.000	
	N	73	73

** . Correlation is significant at the 0.01 level (2-tailed).

The SPSS output in Table 3 shows a correlation coefficient of **0.793** between internal document management and profitability, indicating a strong and positive relationship. With a **p-value of 0.000**, which is less than the significance threshold of 0.05, the result is statistically significant. This suggests that effective internal document management significantly contributes to the profitability of manufacturing firms in Rivers State, while other profitability factors may stem from external influences. Therefore, the null hypothesis stating that there is no significant relationship between internal document management and profitability—is rejected. The alternate hypothesis is accepted, affirming a strong and significant relationship between internal document management and the profitability of manufacturing firms.

DISCUSSION OF FINDINGS

The findings of this study demonstrate a strong and positive relationship between internal document management and the

sustainability of manufacturing firms in Rivers State, Nigeria. This suggests that firms employing structured, efficient practices for the creation, storage, retrieval, and disposal of documents are better positioned to achieve sustained operational performance. Internal document management enhances organizational efficiency, transparency, and compliance—core elements that support long-term sustainability. These results align with previous research, highlighting the critical role of documentation in fostering institutional resilience, decision traceability, and responsiveness to internal and external reporting demands. The study's alignment with Adiele and Obara (2022), who found a similar link between data preservation and agility in the banking sector, reinforces the broader applicability of effective information management as a strategic tool for organizational continuity across industries.

Furthermore, the study's findings support the Resource-Based View (RBV) theory, which posits that internal capabilities such as document management systems can act as strategic assets when they are valuable, rare, inimitable, and embedded within organizational processes (Barney, 1991). Well-managed documentation systems meet these criteria by facilitating operational coordination, regulatory compliance, and strategic planning. They ensure that firms are audit-ready, legally protected, and capable of forward-looking decision-making—key dimensions of sustainability. This conclusion is consistent with global insights from Smallwood (2014), who found that organizations with poor document governance face elevated risks, while those with strong systems benefit from improved transparency, reduced operational risk, and enhanced stakeholder trust. Altogether, the study confirms that effective internal document management is not only a technical necessity but also a strategic driver of sustainable business success.

CONCLUSION AND RECOMMENDATION

The study concludes that internal document management significantly enhances the sustainability of manufacturing firms in Rivers State, Nigeria. This indicates that firms adopting robust and systematic document management practices are more likely to achieve long-term operational success, organizational resilience, and adaptability in an ever-changing business environment. Effective internal document management supports improved decision-making, ensures regulatory compliance, preserves institutional knowledge, and mitigates operational risks—all of which are critical components of sustainable business practices.

Based on these findings, the study recommends the following:

- i. Organizations should transition from fragmented or manual documentation methods to structured systems that support the consistent creation, storage, retrieval, and disposal of records. This includes the adoption of document management software, digital archiving tools, and cloud-based platforms to improve accessibility, efficiency, and data security.
- ii. Internal documentation must be embedded into the firm's overall strategic planning, with leadership committing adequate financial and human resources to develop and

maintain efficient document management processes as a key pillar of sustainability and long-term growth.

REFERENCES

1. Adiele, G. C. & Obara, C. E. (2022). Data preservation and agility of deposit-money banks in Rivers State, Nigeria. *International Journal of Innovative Finance and Economic Research*, 10(4), 51-73
2. Aregbeyen, O. (2012). The determinants of firm growth in Nigeria. *Pakistan Journal of Applied Economics*, 22(1 & 2), 19-38
3. Boiko, B. (2002). *Content management bible*. New York: Hungry Minds.
4. Chachage, B. Ngulube, P. & Stilwell, C. (2006). Developing a model corporate records management system for sustainability reporting: A case of the Iringa region in Tanzania. *SA Journal of Information Management* 8(1)
5. Clarke, S., & Roome, N. (1999) Sustainable business: Learning-action networks as organizational assets. *Business Strategy and the Environment*, 8(5), 296-310.
6. De Carvalho, J. R. M., Chim-Miki, A. F., Da Silva, C. C., & De Araujo Carvalho, E. K. M. (2019). Análise multicriterial da competitividade empresarial sob tríplice perspectiva: *Financeira, Governança Corporativa e Sustentabilidade. Revista de Globalización, Competitividad & Gobernabilidad*, 13(2), 116-131.
7. Dmitrievna, P. A. (2010). *Electronic document management*. A term paper submitted to the Department of Information Systems and Applied Mathematics, Murmansk State Technical University, Russia
8. Efremova, L. I. (2019). Vybor sistemy elektronnoho dokumentooborota dlia predpriiatiia. *Vestnik Volzhskogo universiteta im. V. N. Tatischeva*, 2 (1), 23–31.
9. Garcia, M. L. S. (2022). Business sustainability and financial performance. *Journal of Management* 38(72)
10. Giaretta, D. L. (2011) *Advanced Digital Preservation*. Springer Verlag.
11. Gupta, P. D., Guha, S. & Krishnaswami, S. S. (2013). Firm growth and its determinants. *Journal of Innovation and Entrepreneurship*, 2(15), 1-14
12. Harianto, R. A., & Sari, P. N. (2021). Strategic digitalization of UMKM business as an alternative to survive the COVID-19 pandemic. *Linguistics and Culture Review*, 5(S1), 617–663.
13. Indianapolis (1996). *Database Unleashed*. SAMS Publishing
14. International Federation of Data Organizations for Social Science (2012). *Data preservation*.
15. Khan, H.U. & Ejike, A.C. (2017). An assessment of the impact of mobile banking on traditional banking

- in Nigeria, *Int. J. Business Excellence*, 11(4), 446–463
16. KPMG. (2011). *Business briefing series: 20 issues on building a sustainable business*.
 17. Margaretha, F. & Supartika, N., (2016). Factors Affecting profitability of Small-Medium Enterprises (SMEs) firms listed in indonesia stock exchange. *Journal of Economics, Business and Management*, 4 (2), 132-137.
 18. Mohd Yusuf, B. N. (2012). Communications and trust is a key factor to success in virtual teams collaborations. *International Journal of Business and Technopreneurship*, 2(May), 389–397.
 19. Muhamad, L. F., & Rilvani, E. (2021). Systematic review: Perlindungan Konsumen Transaksi Online. *SMART Management Journal*, 40–46
 20. Musah, M., Kong, Y., Atwi, S. K., Donkor, M., Quansah, P. E. & Obeng, A. F. (2019). A study into growth and firms' financial performance: Evidence from the Ghana Stock Exchange (GSE). *International Journal of Multidisciplinary Research and Development*, 6(5), 45-53
 21. Odusanya, I. A., Yinusa, O. G. & Ilo, B. M. (2018). Determinants of firm profitability in Nigeria: Evidence from dynamic panel models, SPOUDAI - *Journal of Economics and Business*, 68(1), 43-58
 22. Oliverio, M. E., Pasewark, W. R. & White, B. R. (2015). *The Office, Procedures and Technology*, (South-Western Educational Publishing; New York), 545- 547.
 23. Olutunla, G. H. & Obamuyi, T.M., (2008). An empirical analysis of factors associated with the profitability of Small and Medium Enterprises in Nigeria. *African Journal of Business Management*, 2 (10), 195-200.
 24. Pakhomov, E. V. (2012). Analiz sistem elektronnoho dokumentooborota v organakh municipalnogo upravleniia. *Izvestiia iuzhnogo federalnogo universiteta. Tekhnicheskie nauki*, 188–194
 25. Penn, I. A., Pennix, G. & Coulson, J. (1994). *Records management handbook*, 2nd rev. Ed.
 26. Ragimova, N. A., Abdullayev, V. H. & Abbasova, V. S. (2020). Analysis of main requirements for electronic document management systems. *ScienceRise*, 1, 28–31.
 27. Sarita, S. & Paul, C. (2020). Data and power: Archival appraisal theory as a framework for data preservation. *Proceedings of the ACM on Human-computer interaction* 4(CSCW2), 1-18.
 28. Shepherd, E. & Yeo, G. (2003). *Managing Records: A Handbook of Principles and Practice*. Facet Publishing, London.
 29. Singh, S. (2009). *Database systems: Concepts, Design and applications* New Delhi: Pearson Education India
 30. Tantua Jr. E. & James, P. G. (2019). Information Security and Organizational Efficiency of Deposit Money Banks in Port Harcourt, Rivers State, Nigeria. *International Journal of Business & Entrepreneurship Research*, 13(1), 1-11
 31. Webster, B. Hare, C. & McLeod, J. (1999). Records management practices in small and medium-sized enterprises: a study in North-East England. *Journal of Information Science* 25(4), 283-294
 32. Wong, D. & Ngai, E. (2021). Economic, organizational, and environmental capabilities for business sustainability competence: Findings from case studies in the fashion business. *Journal of Business Research*, 126, 440-471.
 33. Xuemei, L., Yan, L., & Lixing, D. (2009). Study on information security of industry management. In *Information Processing, APCIP, Asia-Pacific Conference*, 1, 522 –524.