

**Information Security and Corporate Performance of Public Organisations in Ogun
West Senatorial District, Ogun State, Nigeria**

By

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Abstract

Public service is designed with the intent of rendering essential services to the public. Yet, the aptness of public servants in delivering services to the public set enhanced public service corporate performance. This study investigates information security as a veritable tool in enhancing public service corporate performance. It adopts a descriptive survey design using structured questionnaire administered on public servants selected randomly in Ogun West Senatorial District, Ogun State, Nigeria. One hundred and fifty (150) copies of the questionnaire were administered, filled, returned and used as sample for the study. Data gathered was analyzed using frequency, percentage and mean methods. Findings revealed that 3.23 overall grand mean for the two research questions is greater than 2.50 acceptance level. This result showed information security at higher level among public organizations in the district. Hence, influences public service corporate performance. The study concluded that information security is a veritable tool in enhancing public service corporate performance. It was recommended that information security should be encouraged to prevent unauthorized access into the public service database. Also, operational strength and information security activities with current information security mechanisms for an uninterrupted public service corporate performance in Ogun State, Nigeria should be energized.

Keywords: Corporate Performance; Information Security; Public Service; Veritable Tool

Introduction

Prompt service delivery depicts public service corporate performance. Public service intent purposefully accomplishes developed government objectives and these objectives convey the entire government activity that emphasized anticipated yield expected at a point in time (Drucker, 2021). Public service make nations have impact of government through infrastructural development which engenders concrete linkage between government and her citizens while standard projects are executed to enhance peoples well-being (Van de Walle & Scott, 2009).

Public organizations ensure speedy delivery of accessible; affordable and open to all valuable services; renders non-profit oriented; standard and high quality services (Grzegorzek, 2021). It is the public servants who are vital managers of government ability in making policies which hasten admirable corporate performance and competitive advantage maintenance (Austin, 2021; Zhu, Liu & Chen, 2018).

Corporate performance requires objective setting as organizational device to assess how successful management directs the affairs of a system in drawing-out set goals for organizational survival (Drucker, 2021). The activity brings about accomplishing organizational aims and objectives with remarkable breakthroughs, economic growth and employees' performance attainable through information distribution, resourceful error and innovative efficiency (Mendez, 2016). Also, it shows employees' intellect of maintaining organizational good standing sustenance compared to the set objective. Thus, implementing corporate performance blueprint guarantees conveyance of organizational aims and objectives to set attainable standards for development (Mendez, 2016). In this regard, a study on work systems and corporate performance found information delivery, performance oversight and performance effectiveness (business coordination) to positively influence corporate performance. In effect, organizations corporate performance ethics prominence come to grip with competitive advantage to increase corporate performance through operative information security (Zhu, Liu & Chen, 2018).

Information is the structural slab for objectives sustenance (Okoye, 2017). It produces valuable facts that human ideas used in pooling calculated data, appreciated facts, and facts with relevance that becomes knowledge (Terra & Angeloni, 2019). Information influences how the workforce perform their duties and enable organizations become successful in acquiring skill to handle and use in expenditure reduction, expanding service delivery, reducing threats and become approachable by clients (Rao, 2014). It assists in making decisions, preparing plans, taking actions, controlling activities to innovate, strategize, industrialize, and render services. Also, it is used in enabling continuity and accomplishment of corporate objectives observed as valuable resource of an organization (Juneja, 2018). Information as a resource, advances high-class definite organizational essential capabilities that permit outperforming rivals. As a result, Resource-Advantage Theory (RAT) identified as Resource-Based View (RBV) with Value-Based View (VBV) underpin the study (Hunt & Morgan, 1995).

Resource-based view provides policymakers with means of appraising employees' prospective features that can be used in directing a competitive edge. The theory, advocates the formation of blueprints that best describes an organization's internal resources and competences in relation to external prospects. Possession of uncommon resources in the midst of competitors enhance comparative advantage that enable organizations have higher value and make yields at a reasonable cost and as well enhance competitive advantage amongst equals. On the other hand, value-based view makes available other means of creating contacts between management and employees as regard their worth with principles that centered on fundamental values, design management practices to reflect and express values in building basic expertise for the organization. Also, it invents a strategy consistent with the values, using the competences in competing with the new and uncommon methods in implementing a high-ranking executive tasks. This alternate theory, observes the blueprints which provide a technique of concentrating on employees' value rather than a resourced-based approach (O'Reilly III, 2000).

Kong, Jung, Lee & Yeon (2015) researched and the findings revealed information safety activities as influencing stability in transactions to improve organizational performance which assist organizations in devising policies for information securities to enhance corporate performance. An analysis of effects of information security investments found venturing into information security as very important in accomplishing organizations' undertakings (Kong, Kim & Kim, 2012). Also, Urban, Sultan & Qualls (2000) established that confidentiality, integrity, and availability are information security values necessary in enhancing service delivery (corporate performance). Information security is therefore aimed and applied to guard organizational principles; computerized and secretive plans, complex and peculiar facts from free access. It is the exercise that protects information from unjustified contact and alteration in the course of sharing. Its usage guards against misuse, disclosure, destruction, modification and disruption of evidences (Roohparvar, 2020).

Information security has been developing significantly in the past years to strengthen organizations in obtaining deep knowledge of networking safeguard and concomitant structures; uses and database; security analysis; appraising information systems, and strategizing for corporate stability. This drive is not restricting unsuitable dealings alone, but is not allowing free access to information uses, exposure, interference, reform, crosschecking, copying and damaging of facts (Garg, 2021). Yet, understanding the procedure of information security is imperative to an organization as it advances organizational performance and

develops information security device such as controlling of IT, individual expertise in IT and IT structure (Tewemba, Kamdjoug, Bell & Wamba, 2019). Also, information security enjoys value in confidentiality, integrity and availability. Confidentiality disallows revelation of information to unofficial persons, bodies and procedures. Integrity maintains data accuracy and completeness because information cannot be edited illegally. And, availability assured obtaining information when required (Casetto, 2019; Roohparvar, 2020 & Garg, 2021). A study titled “placing trust at the centre of your internet strategy” found confidentiality, integrity, and availability of information security to be ethics that must be assured while handling corporate performance (Urban, Sultan & Qualls, 2000). Thus, corporate performance is perceived as prompt public service delivery through execution of strategic plans, efficient process, product fairness, threat control and human capital management.

Accomplishing public service corporate performance intensifies continuous prompt service delivery. Public organization corporate performance is attained when any information required is made available (Dane, 2021). It eradicates poverty, stimulate self-sufficiency, reduce revenue variations, develop work engagements, remove inequalities within districts, boost economic plans and economic power de-emphasizing. It ensures industrial development and profitable progress; make sure there is fairness in the collection of taxes and wealth sharing. Also, it eliminates impartiality in the provision of structural amenities, fortified information security networks as the main and significant public service corporate performance device.

Information security decreases inner and outside threats on organizational information data base and safeguard delicate information, shield organizations from cyber-attacks, guarantee corporate stability, and ensure investors interest is well secured without security threats (National Institute of Standards and Technology, 2021). Information is imperative to public service corporate performance and it prompts service delivery as the public service corporate performance tool that need to be fortified (Dane, 2021). Thus, public establishments must poise for durable security of facts and data that cannot be accessed illegally as unfortified information create avenues for incessant competitive advantage over organizational confidential facts and data (Dane, 2021). Investing in information security is an essential factor because every organization need to keep confidential information safe from cyber-attacks and safety oppressions (National Institute of Standards and Technology, 2021). As a result, this study perceived information security as a veritable tool in enhancing public service corporate performance.

Statement of the Problem

Appropriate delivery of quality service is the intent of government in establishing public service while public servants are implementers of public service strategies. However, aptness in delivering public service corporate objective seem to be a mirage rather than reality as every vibrant resolutions of government are unsecured. Regrettably, crucial statistics in the public service get lost or stolen for the reason that public servants' attitude poise for syndrome of "government work is no man's business". Hence, securing very vital information is imperative. This study therefore examined how information security enhances corporate performance in public service with focus on public organizations in the Western District of Ogun State, Nigeria.

Objective of the Study

Objectively, this study examines information security as a tool in enhancing public service corporate performance. It specifically determines the structure of information security in enhancing public service corporate performance and as well investigates information security mechanism in enhancing public service corporate performance.

In line with these objectives, the following research questions were raised:

1. What are information security structures that serve as tool in enhancing public service corporate performance?
2. What are information security mechanisms that enhance public service corporate performance?

Methodology

This study is a descriptive survey carried out amongst five local governments in the district (i.e. Ado Odo/Ota, Imeko/Afon, Ipokia, Yewa North and Yewa South). Population consists of public servants in the district. A total number of one hundred and fifty (150) respondents were randomly selected for the study. Thirty (30) respondents were selected from each of the five local governments in the District and used as sample for the study.

The instrument for data collection consists of a twelve-question item questionnaire validated by Information Managers. However, four options were suggested in the instrument as: Strongly Agree – 4; Agree – 3; Disagree – 2, and Strongly Disagree – 1 where the respondents were to choose one. One hundred and fifty (150) copies of the questionnaire were prepared

and sampled on the selected respondents. Every copy was retrieved by the researcher and the collected data were analyzed with frequency counts, percentage and mean methods. The standard for acceptability was set at 2.50 while any research question that scored below the set standard was rejected.

Results

Table I: Descriptive Analysis of Responses on Information Security Structure

Items		SA	A	D	SD	Mean
Firewalls		96	54	0	0	3.36
	%	64	36	0	0	
Security occurrence control		42	78	17	13	2.99
		28	52	11	09	
Avoiding data loss		63	87	0	0	3.42
	%	42	58	0	0	
Interference discovery structure		53	97	0	0	3.35
	%	35	65	0	0	
Interference avoidance device		55	95	0	0	3.37
	%	37	63	0	0	
Grand Mean		= 3.33				

Source: Field Survey Data (2021)

Table I revealed 3.33 as grand mean to show that the level of information security structures was high among public organizations.

Table 2: Descriptive Analysis on Information Security Mechanisms

Items		SA	A	D	SD	Mean
Password enable information access		67	83	0	0	3.45
	%	45	55	0	0	
Verification and resistance device		27	123	0	0	3.18
	%	18	82	0	0	
Data alteration forbidden		53	97	0	0	3.35
	%	35	65	0	0	
Systems and network well-coordinated		69	81	0	0	3.46
	%	46	54	0	0	
Safeguarding of data specified		58	62	21	09	3.13
	%	39	41	14	06	
Information security certifications		51	99	0	0	2.23
	%	34	66	0	0	
Grand Mean		= 3.13				

Source: Field Survey Data (2021)

Table 2 showed a grand mean of 3.13 revealing that information security mechanisms' use level was high amongst public organizations.

The overall grand mean for the two research questions is:

$$\begin{aligned} \frac{3.33 + 3.13}{2} &= \frac{6.46}{2} \\ &= 3.23 \end{aligned}$$

With the overall grand mean of 3.23 greater than 2.50, the result revealed that the level of information security structures and information security mechanisms were high amongst public organizations and in consequence, enhanced public service corporate performance in the district.

Discussion of Findings

The first six questionnaire items gathered data on research question one. Result showed mean responses of 3.36, 2.99, 3.42, 3.35, 3.37 and 3.47 with corresponding combined agreed and strongly agreed percentages as 100%, 80%, 100%, 100%, 100% and 100% respectively; while the grand mean was 3.33. The findings showed that research question one which sought to know the information security structures that serve as tool in enhancing public service corporate performance was accepted. This result is in tandem with Cassetto (2019) assertion that firewalls; security occurrence control, avoiding data loss, interference discovery structure, interference avoidance device, operations logics, etc. are information security structures used in safeguarding information. Also, information security permits organizations to guard numerical and correspondence facts. Likewise, National Institute of Standards and Technology (2021) corroborates that safeguarding of organizational information and that of the client is essential in enabling organizational strength and growth towards enhanced corporate performance. Organizations' essential corporate integrity with customers' interest protection are life-threatening; yet, secured information as a priority maintains government position and worth. Therefore, investment against cyber-attacks and security threats is imperative to organizational data protection.

Items seven to twelve were used in gathering data on research question two. The result showed mean responses of 3.45, 3.18, 3.35, 3.46, 3.13 and 2.23 while combined agreed and strongly agreed responses revealed 100%, 100%, 100%, 100%, 80% and 100% respectively. Yet, the grand mean was 3.13. This result is in line with Urban, Sultan and Qualls (2000), Roohparvar (2020) and Garg (2021) positions that confidentiality, integrity and availability are ethics of

information security. They posited that confidentiality makes sure there is limitation to information accessibility, integrity guarantees curbing of data editing and modification, while availability verifies accessibility procedures, backup, and coordination of hardware and system networks unabatedly. Also, the result corroborates National Institute of Standards and Technology (2021) position that significance of information security in organizations is very high because organizations require information security mechanisms to guide against information loss, data cracks, unofficial access, and other threats to information. On the other hand, item twelve of the research question which sought responses on information security certification had a mean of 2.23 lesser than the set acceptability standard of 2.50. This result was in tandem with Cassetto (2019) assertion that information managers must be appropriately trained and certified because certification in information security enhances information managers' proficiency towards organizational corporate performance.

The findings of this study also revealed 3.23 as overall grand mean and presenting information security as a tool capable in enhancing public service corporate performance. This result was in tandem Kong, Jung, Lee and Yeon (2015) assertion that information security advances operational strength to enhance organizational performance. The finding shows that operational strength and information security activities outcome in organizations deserve information security mechanisms toward public service corporate performance enhancement.

Conclusion

Public service delivers amenities to enhance peoples living standard in a nation with the intention of influencing her citizens' day-to-day activities. It reflects positive service delivery as the aftermath of engagements for organizational corporate performance sustenance. The study concluded information security structure enhances corporate performance in the public service; while effective use of information security mechanisms enhances public service corporate performance. Yet, information managers' need certification for their proficiency in having optimal corporate performance of public organizations.

Recommendations

This study therefore recommends that:

- Government should make adequate budget for continuous knowledge enhancement of information security managers so as to keep abreast of new happenings in fortifying their database.
- Information security should be encouraged to forestall unauthorized access into the public service database to safeguard strategies toward enhanced public service corporate performance.
- Continuous knowledge enrichment in information security with certification should be a must for information security managers.
- Management should ensure information security strategies are integrated into the system to prompt realistic corporate performance.
- Management should procure current information security gadgets to rid-off obsolescence in the practice of information security.
- Staff development and training on information security should be encouraged for continuous update on information managers' understanding.
- Operational strength and information security activities be energized with current information security mechanisms for uninterrupted public service corporate performance.

References

- Austin, J. (2021, December). *What it means to be a public servant*. British Columbia. <https://www2.gov.bc.ca/gov/content/careers-myhr/about-the-bc-public-service/being-a-public-servant>
- Cassetto, O. (2019). *Information security*. Exabeam. <https://www.exabeam.com/information-security/>
- Dane, K. (2020). *Explain the major objectives of the public sector*. <https://www.owlgen.in/explain-the-major-objectives-of-the-public-sector/>
- Drucker, P. (2021, December). *Corporate objectives*. Tutor2u. <https://www.tutor2u.net/business/reference/corporate>
- Garg, R. (2021). *What is information security*. Geeks for Geeks. <https://www.geeksforgeeks.org/what-is-information-security/>

- Grzegorzek, J. (2021). *Examples of business objectives in the public sector*. Super Business Manager. <https://www.superbusinessmanager.com/examples-of-business-objectives-in-the-public-sector/>
- Hunt, S. D. & Morgan, R. M. (1995). The comparative advantage of the firm. *Journal of Marketing*, 59, 1-15.
- Juneja, P. (2018) *Human capital management*. Management Study Guide Privacy Policy. <https://www.managementstudyguide.com>.
- Kong, H., Jung, S., Lee, I., & Yeon, S. (2015). Information security and organizational performance: Empirical study of Korean Securities Industry. *ETRI Journal*, 37(2), <https://dx.doi.org/10.4218/etrij.15.0114.1042>
- Kong, H., Kim, T. S. & Kim, J. D. (2012). An analysis on effects of information security investments: ABSC perspective. *Journal of Intell. Manuf. Vol. 23(4)*, 941-953.
- Mendez, R. (2016). *Why corporate performance management is important*. <https://www.linkedin.com/pulse/why-corporate-performance-management-important-topic-finance-mendez#>
- National Institute of Standards and Technology (2021, December). *The importance of information security in your organization: Top threats and tactics*. AuditBoard. <https://www.auditboard.com>
- Okoye, S. I. (2017). *Strategies to minimize the effects of information security threats on business performance*. MediaProquest. <https://www.media.proquest.com/>
- O'Reilly III, C. A. (2000). *Hidden Value*. Boston, MA: Harvard Business School Press, 1-20.
- Rao, R. I. K. (2014). *Information Management: Scope, Definition, Challenges and Issues*. Research Gate. <https://www.researchgate.net>
- Roohparvar, R. (2020). *What is Information Security?* InfoguardSecurity. <https://www.infoguardsecurity.com/what-is-information-security>
- Terra, J. C. & Angeloni, T. (2019). *Understanding the Difference between Information Management and Knowledge Management*, Terra Form Consultore jcterra@yahoo.com & angelge@hotmail.com
- Tewemba, H. N., Kamdjoug, K., Bell, G., & Wamba, S. F. (Sept. 2019). Effects of information security management systems of firm performance. *American Journal of Operations Management and Information Systems*, 4(3), 99-108 DOI:10.11648/j.ajomis.20190403.15
- Urban, G. L., Sultan, F., & Qualls, W. J. (2000). Placing trust at the center of your internet strategy. *Sloan Manag. Rev. Vol. 42(1)*, 39-48.

- Van de Walle, S. & Scott, Z. (2009). *The role of public services in state and nation building: Exploring lessons from European history from fragile states*. GSDRC Governance and Social Resource Centre, Birmingham. <https://www.gsdr.org/>
- Zhu, C., Liu, A., & Chen, G. (2018). High performance work systems and corporate performance: The influence of entrepreneurial orientation and organizational learning. *Frontiers Journal of Business Research in China*,12(4). <https://doi.org/10.1186/s11782-018-0025-y>.