

# Information Culture, Organizational Structure and E-library Service Delivery in University Libraries in South-South, Nigeria

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## Abstract

Electronic library service delivery is crucial for user satisfaction in this information and communication technology dispensation. Studies however indicated that the level of e-library service delivery in university libraries in Nigeria is low and inefficient. Evidences point to the contribution of information culture and organizational structure to e-library service delivery, but it is not apparent that a study in South-South, Nigeria has addressed the influence of information culture and organizational structure on e-library service delivery. This study therefore investigated the influence of information culture and organizational structure on e-library service delivery in university libraries in South-South, Nigeria. The study adopted survey research design. The population of the study was 618 academic librarians and library officers in university libraries in South-South, Nigeria. Total enumeration was used. A validated structured questionnaire was used for data collection. The Cronbach's Alpha coefficients for the constructs ranged from 0.76 to 0.95. A return rate of 79.6% was achieved. Data were analyzed using descriptive and inferential (linear and multiple regression) statistics. The findings of this study revealed a significant joint influence of information culture and organizational structure on e-library service delivery in university libraries in South-South, Nigeria ( $Adj. R^2 = 0.570$ ,  $F(2, 489) = 326.050$ ,  $p < 0.05$ ). Information culture ( $R^2 = 0.545$ ,  $\beta = 0.738$ ,  $t(492) = 24.238$ ,  $p < 0.05$ ) and organizational structure ( $R^2 = 0.495$ ,  $\beta = 0.703$ ,  $t(492) = 21.903$ ,  $p < 0.05$ ). The study concluded that information culture, organizational structure and innovative work behavior are crucial to e-library service delivery in university libraries in South-South, Nigeria. The study recommended that the management of university libraries improve on the level of e-library service delivery. The management should also encourage information innovation and information management to improve e-library service delivery in university libraries.

**Keyword:** E-library service, E-library service delivery, Information culture, Organizational structure, University libraries

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## INTRODUCTION

Electronic library (E-library) service delivery is crucial for user satisfaction in this information and communication technology (ICT) dispensation. In the era of the ICT explosion, e-library service delivery plays a vital role in the development of libraries and improves the quality of services provided to users. The realistic view of e-library service delivery issues is that managing the development and delivery of e-library service is a significant current challenge for libraries and librarians. However, library's provision of e-library service is inevitable and essential if the library wants to remain indispensable and relevant to its organizational community. Today, web-based information technologies inextricably linked with the growing role of the internet as a unified communication environment for information exchange have necessitated adopting e-library service delivery in university libraries.

Despite the tremendous benefit of e-library service delivery in university libraries to users, some researchers have observed that there is low and ineffective e-library service delivery. In developed world, Johnson (2007) reported that the University of York is among the top universities in the United Kingdom, yet the library has not adopted the delivery of all manner of e-library services to users. The author further noted that the University library has yet to fully embrace a greater range of e-library services and materials provision. In a survey of some of the critical issues associated with e-library service delivery in the United Kingdom recently, Pinfield (2016) reported that the low and ineffective-library service delivery by university libraries is associated with high running cost, low institutional funding, misplaced budgeting priorities, and technical issues.

In Africa, Kasalu and Ojiambo (2015) reported that university libraries in Africa have not been able to adequately meet the increased demand of e-library services and resources which has forces these libraries to seek collaborations with other institutions locally and internationally for resource sharing and e-library service delivery. In an empirical study conducted in Ghana by Dadzie (2009), it was reported that infrastructure, technology and training should be considered by the university libraries to increase the rate of e-library service delivery. In a related development, Shiferaw and Jimma (2015) reported that 76.5% of libraries in Ethiopia need to adopt and deliver e-library services to meet the needs of their users. Looking specifically at e-library service delivery by university libraries in Nigeria, Urhiewhu and Omah (2016) conducted an empirical study to investigate the level of e-library service delivery that revealed a low level of e-library service delivery. In South-South Nigeria, Baro and Eze (2013) conducted empirical studies to investigate the level of e-library service delivery stating the challenges and training needs of librarians; the result

revealed a low level of e-library service delivery. There are contributing factors to the concept of e-library service delivery; one of such is the concept information culture.

Lauri, Heidmets and Virkus (2016) conceptualized information culture as attitudes, behaviors, and values that influence people's sensing, gathering, categorizing, processing, communicating, and using information. Information culture can be defined as the practice in which intellectual resources' transformation is maintained alongside the transformation of material resources. This means, bringing information management into the workplace context demands a shift in the focus from an individual to an organizational level. The values embedded in information and the mindsets towards it are the key indicators of information culture in library organizational settings. The various layers of organizational culture influence these values and attitudes. Thus, information culture is the element of the library's organizational cultures that influences information management. In the same manner, information culture is embedded in the library's organizational values, norms, and practices that shape the importance and attitude towards information creation and use in the library (Widén & Karim, 2018).

An empirical study by Leonardo (2014) has identified important indicators of information culture. Among these indicators are information creation, information sharing, information innovation, information management, and information system management. The critical issue involved in information culture is managing information in an organization using modern information technologies. However, Anand and Singh (2011) ascertain that organizations will need to pay more considerable attention to managing soft knowledge, such as tacit knowledge, judgment, and intuitive abilities, to achieve effective information management. In summary, information culture is the capacity of an organization to manage information effectively, information system applications, and infrastructure to support operations, business processes, innovation, and decision making. However, the level of success achieved in e-library service delivery will depend on the nature of the information culture adopted by the library organization.

Apart from information culture, there are other variables that can contribute to e-library service delivery such as organizational structure. The importance of organizational structure cannot be over emphasized. Organizational structure is the framework of the relations on jobs, systems, operating processes, people, and groups to achieve the organizational goals. Organizational structure is a coordination mechanism, and it affects all organizational processes. Organizational structure refers to the models of internal relations of the organization. It is a formally constituted group of people who have identified tasks and work together to achieve a specific purpose. It can also be referred to as how a group of people is

formed, its communication lines, and its means for channeling authority and making decisions. Organizational structure is a set of methods dividing the task in determining duties and coordinates them (Monavarian, Asgari, & Ashna, 2007).

Schonfeld (2015) argued that many university libraries have an uneven experience defining their major strategic issues, let alone making effective decisions about how to move forward. The author submitted that organizational structure is too often represented by nothing more than the hierarchical organizational chart in university libraries. The author added that those university libraries under the organizational chart are managed through committees, task forces, working groups, and other vehicles, which are no less important than the hierarchical structure. For university libraries to be successful in e-library services delivery, the organizational structure requires simplicity and clarity. One crucial question is what kind of organizational structure can support the effective and efficient e-library service delivery in university libraries in Nigeria, specifically, South-South, Nigeria?

Shields (2016) identified two main organizational structures, which are mechanic organizational structure and the organic organizational structure adopted by this study. The mechanic structure is more formalized with high specialization and high administrative intensity, while the organic structure is said to be less formalized. Thus, it is evident that all organizational structures may experience challenges based on the circumstances around the organization at a given point in time. Since most organizational structures are fixed processes, the process to change them is very lengthy, and this process cannot be adapted to all changes within the organization, especially temporal or short-term changes. For a library organization to ensure that its organizational structure is always effective and efficient for e-library service delivery, it should ensure that the structure is flexible and adaptable to most anticipated circumstances that will enhance innovation work behavior. This study therefore investigated the influence of information culture and organizational structure on e-library service delivery in university libraries in South-South, Nigeria.

### Objective of the Study

The main objective of this study is to investigate the influence of information culture and organizational structure on e-library services delivery in university libraries in South-South, Nigeria. The specific objectives of the study are to:

1. Find out the level of e-library service delivery in university libraries in South-South, Nigeria.
2. Find out the prevalent information culture in university libraries in South-South, Nigeria.

3. Find out the type of organizational structure adopted by university libraries in South-South, Nigeria.
4. Investigate the influence information culture on e-library service delivery in university libraries in South-South, Nigeria.
5. Investigate the organizational structure on e-library service delivery in university libraries in South-South, Nigeria.
6. Investigate the joint influence of influence information and organizational structure on e-library service delivery in university libraries in South-South, Nigeria.

### Research Questions

The following research questions served as a guide towards addressing the research objectives. Hence, the research answered the following questions.

1. What is the level of e-library service delivery in university libraries in South-South, Nigeria?
2. What information culture is prevalent in university libraries in South-South, Nigeria?
3. What is the type of organizational structure adopted by university libraries in South-South, Nigeria?

### Research Hypotheses

In order to achieve the stated objectives, the following hypothesis stated in null form were tested at 0.05 level of significance

1. Information culture will not significantly influence e-library service delivery in university libraries in South-South, Nigeria.
2. Organizational structure will not significantly influence e-library service delivery in university libraries in South-South, Nigeria.
3. Information culture and organizational structure will not jointly significantly influence e-library service delivery in university libraries in South-South, Nigeria.

### Literature Review

E-library service delivery in university libraries became possible with the advent of high performance software and hardware systems, communication channels and specialized application software, caused explanatory activity in this information technological area. Herein, the e-library definition changes and updates in accordance with the evolution of the understanding of e-library service delivery goals, its objects and purpose. For more accurate and comprehensive definition of e-library service delivery, researchers employ a variety of

approaches such as classification and generalization of the known definitions (Baryshev, Babina, Zakharov, Kazantseva & Pikov, 2015).

E-library service delivery, according to Daniel (2012), is the collection of networked digital information resources and associated technical and managerial infrastructure. E- Library service delivery is assumed to include data and metadata in various formats that are created or assembled in order to provide services to users. The e-library is a library in which collections are stored in digital formats as opposed to print, microforms or other media. It can be accessed only through computers. Electronic library achieves its objectives by creating opportunities for the users to access and retrieve appropriate information that cater for their information needs. E-library service delivery is responsible for providing instant access to digitized information, electronic information resources and services with the aid of computer or telecommunication technologies. E-library service delivery is the library where some or all of the holdings of the library are available in electronic format, and the services of the library are also made available electronically-frequently over the Internet so that users can access them remotely (Onwuchekwa & Jegede, 2011).

E-library service delivery acquires, processes, stores, evaluates and disseminates information via electronic means to the audience in need of information. It can serve as a medium for achieving national and community development through provision of relevant information necessary for decision making and policy enhancement. Electronic library is a multi-disciplinary concept that shares various branches of computer science including data management, information retrieval, library science, document management, information systems, the web, image processing, and artificial intelligence. Multidisciplinary nature of electronic library engenders flexibility in the definitions which makes it difficult to have a singular definition of e-library (Anyim, 2018). According to Hirsh (2014), the mission of e-library service delivery in university library is to provide both information services and resources that are capable of meeting the research, teaching and learning needs of the faculty and students.

Information culture is a relatively recent concept, but nevertheless has attracted research interest from around the world. The first mention of information culture is generally credited to a researcher in Finland, Mariam Ginman. Ginman (1993) expressed the concept of information culture as one which was open to change and innovation in particular, where management was responsive to information about the external environment. In other words, an information culture was presented as a necessary and desirable state if the organization was to be successful and competitive. Ginman's work prompted much further study, and continues to be the basis for research (Hansen & Widén, 2017; Widén & Hansen,

2012). However, new perspective on information culture has been broadened by other researchers (Oliver & Foscarini, 2014) to include all cultural settings which includes organizations where information may not be well managed as well as those very positive situations where efficient and effective systems and processes have been implemented successfully and are being used appropriately by all stakeholders.

Oliver and Foscarini (2014) summarize that there are two clusters of definitions of information culture reflected in the literature. One cluster considers information culture as a culture of information, an environment in which information is well managed and used effectively and efficiently. The other cluster considers the concept of information culture as reflecting cultural values, attitudes, and behaviors relating to information, whether they are positive or negative, effective or ineffective. Accordingly, all organizations and communities, wherever in the world they are located, will have an information culture. Furthermore, the more complex the entity, the more likely it is to be characterized by multiple information cultures (Oliver, 2017).

Information culture is an important component of an organization. Every organization, no matter how large or small it is, regardless of type and function, wherever in the world it is situated, has an information culture (Oliver, 2011). Information culture is a part of the whole organizational culture and is inextricably intertwined with it. Oliver (2011) noted that it is only by understanding the organization that progress can be made with information management activities. Information culture is difficult to define and many approaches exist. In the wide range of approaches information culture is closely linked with information technology, information systems and digital world. The literature regarding information culture focuses the relationship between individuals and information use in an organization. Curry and Moore (2003) are most frequently cited in the information culture literature, and there is consensus that values accorded to information, and attitudes towards it are indicators of information culture (McMillan, Chen, Richard & Bhuian, 2012; Curry & Moore, 2003; Oliver, 2008).

Conceptualization of organizational structure is the manifestation of systematic thought. The organization is composed of elements, relations between elements and structure as a generality composing a unit. Structure is high combination of the relations between organizational elements forming existence philosophy of organizational activity. Systematic view of organization to structure shows that structure is composed of hard elements on one side and soft elements on the other side. The review of literature views structural relations from various aspects. Organizational structure is a way or method by which organizational activities are divided, organized and coordinated. The organizations created the structures to coordinate the activities of work factors and control the

member performance (Ahmady, Mehrpour & Nikooravesh, 2016). Organizational structure is usually shown in organizational chart.

Organization structure can be defined simply as the total of the ways in which its labor is divided into distinct tasks and then its coordination and integration is achieved among those tasks. It is the map of relationships that lets the firm orchestrate specialized experts and provides the basic foundation within which an organization functions (Mohammed & Saleh, 2013). Organizational structure institutionalizes how people interact with each other, how communication flows, and how power relationships are defined. It reflects the value-based choices made by the company. It refers to how job tasks are formally divided, grouped, and coordinated and can provide the link between social and psychological subsystems (Rezayian, 2007). It is the formal system of task and reporting relationships that controls, coordinates, and motivates employees so that they cooperate to achieve organization's goals (Underdown, 2003). Bloisi, Cook and Hunsaker (2007) define organizational structure as a grouping of people and tasks into different units to boost coordination of communication, decisions, and actions. Realizing the close connection between the processes taking place inside an organization makes it easier to understand the intricate task of directing an efficient organization.

Child (2005) posits that the purpose of organizational structure is to contribute to the successful implementation of objectives by allocating people and resources to necessary tasks and design responsibility and authority

for their control and coordination. The foregoing assertion underscores the position that organizational structure affects not only productivity and economic efficiency but also the morale and job satisfaction of the work force (Ezigbo, 2011). Additionally, Tran and Tian (2013) believes that organizational structure does not only shape the competence of the organization, but also the processes that shape performance. This also implies that the performance of an organization is influenced by the organizational structure adopted by that organization.

**METHODOLOGY**

The study adopted survey research design. The population of the study was 618 academic librarians and library officers in university libraries in South-South, Nigeria. Total enumeration was used. A validated structured questionnaire was used for data collection. The Cronbach's Alpha coefficients for the constructs ranged from 0.76 to 0.95. A return rate of 79.6% was achieved. To determine the reliability of this instrument, a pre-test was conducted using 60 librarians and library officers in university libraries in South-West, Nigeria. The Data collected was analyzed using the Statistical Product and Service Solutions software (SPSS Version 22). Descriptive statistics such as simple percentage value (%), mean, standard deviation and frequency distribution was considered appropriate for description of variables. linear and multiple regression analysis was used to test the hypotheses.

**RESULTS**

**Table 1.** Level of E-library Service Delivered in University Libraries

Statements	VH (%)	H (%)	L (%)	VL (%)	Mean	S.D	Average Mean
<b>Understanding Customers' Needs</b>							
My library understand the e-library service delivery needs of the users	300 (61.0%)	192 (39.0%)	0 (0%)	0 (0%)	3.61	0.488	<b>3.33</b>
There is knowledge of e-library service delivery in my library	240 (48.8%)	228 (46.3%)	0 (0%)	24 (4.9%)	3.39	0.729	
My library know exactly what the library users expect	228 (46.3%)	216 (43.9%)	48 (9.8%)	0 (0%)	3.37	0.654	
There is interaction between library workers and users in my library	252 (51.2%)	192 (39.0%)	12 (2.4%)	36 (7.3%)	3.34	0.845	
There is sufficient market survey to listen to users complaints in my library	252 (51.2%)	192 (39.0%)	12 (2.4%)	36 (7.3%)	2.93	0.746	
<b>Service Delivery Policies</b>	(%)	(%)	(%)	(%)			

**Table 1. Continuation**

There is customer service delivery standards in my library	108 (22.0%)	288 (58.5%)	72 (14.6%)	24 (4.9%)	2.98	0.749	<b>2.92</b>
There is defined e-library service delivery policy in my library	120 (24.4%)	252 (51.2%)	96 (19.5%)	24 (4.9%)	2.95	0.796	
There is standard e-library service delivery policy in my library	96 (19.5%)	288 (58.5%)	84 (17.1%)	24 (4.9%)	2.93	0.746	
There is regular update of the level of e-library service delivery policy in my library	108 (22.0%)	240 (48.8%)	120 (24.4%)	24 (4.9%)	2.88	0.803	
There is human resources policies in e-library service delivery in my library	108 (22.0%)	240 (48.8%)	120 (24.4%)	24 (4.9%)	2.88	0.803	
<b>Service Delivery</b>	(%)	(%)	(%)	(%)			
There is cohesive teamwork to e-library service delivery in my library	156 (31.7%)	288 (58.5%)	24 (4.9%)	24 (4.9%)	3.17	0.730	<b>3.00</b>
My library usually delivered the e-library services promised the users	84 (17.1%)	324 (65.9%)	60 (12.2%)	24 (4.9%)	2.95	0.697	
E-library service delivery is match with the demand of users in my library	132 (26.8%)	168 (34.1%)	192 (39.0%)	0 (0%)	2.88	0.803	
<b>External Communications</b>	(%)	(%)	(%)	(%)			
There is sufficient communications between my library and the users	144 (29.3%)	276 (56.1%)	72 (14.6%)	0 (0%)	3.15	0.647	<b>3.05</b>
My library viewing external communications as part to what is going on internally	84 (17.1%)	324 (65.9%)	84 (17.1%)	0 (0%)	3.00	0.585	
My library delivered e-library service promised the users	108 (22.0%)	276 (56.1%)	108 (22.0%)	0 (0%)	3.00	0.663	
<b>Overall Mean Grand Mean and S.D of level of e-library service delivery in university libraries in South-South, Nigeria</b>					<b>3.09</b>		

N=492 (Source: Field Survey, 2021)

KEY: VH=Very, H=High, L=Low, VL=Very Low, \*\*\* Decision Rule: if mean is  $\leq 1.49$ =Very Low; 1.5 to 2.49=Low; 2.5=3.49=High; 3.5 to 4=Very High.

The above Table reveals the result that the Overall Grand Mean of level of e-library service delivery in university libraries is  $\bar{x} = 3.09$ . This result implied that the level of e-library service delivery is high in university libraries in South-South, Nigeria. However, the result indicates high level of understanding the needs of the users for e-library service delivery with Average  $\bar{x} = 3.33$ . Also, the result indicates high level of e-library service delivery policies in the libraries with Average  $\bar{x} = 2.92$ . Furthermore, the result indicates high level of actual e-library service delivery with Average  $\bar{x} = 3.00$ . Finally, the result indicates high level of communication with the user's communities with Average  $\bar{x} = 3.05$ .

**Table 2. Prevalent Information Culture in University Libraries**

Statements	SA (%)	A (%)	D (%)	SD (%)	Mean	S.D	Average Mean
<b>Information Awareness</b>							
I have the Knowledge of relevant information in the library	276 (56.1%)	204 (41.5%)	12 (2.4%)	0 (0%)	3.54	0.546	<b>3.42</b>
I am aware of information relevance when I find any in my library	264 (53.7%)	228 (46.3%)	0 (0%)	0 (0%)	3.46	0.499	
I am aware of the important of information to the organizational strategy and objectives of my university library	216 (43.9%)	276 (56.1%)	0 (0%)	0 (0%)	3.44	0.497	

**Table 2. Continuation**

I know how to identify the integrity of information source in my library	204 (41.5%)	252 (51.2%)	36 (%)	0 (0%)	3.34	0.610	
I have high level knowledge of information creation in my library	156 (31.7%)	336 (68.3%)	0 (0%)	0 (0%)	3.32	0.466	
<b>Information Communication</b>	(%)	(%)	(%)	(%)			
My library encouraged the sharing of information	228 (46.3%)	228 (46.3%)	36 (7.3%)	0 (0%)	3.39	0.621	<b>3.31</b>
Oral information communication is practice in my library	192 (39.0%)	288 (58.5%)	12 (2.4%)	0 (0%)	3.37	0.530	
My library uses the appropriate flow of information communication.	192 (39.0%)	252 (51.2%)	48 (9.8%)	0 (0%)	3.29	0.635	
My library encouraged information feedback from users.	180 (36.6%)	252 (51.2%)	60 (12.2%)	0 (0%)	3.24	0.655	
My library uses the relevant channels of information communication.	156 (31.7%)	300 (61.0%)	36 (7.3%)	0 (0%)	3.24	0.576	
<b>Information Innovation</b>	(%)	(%)	(%)	(%)			
My library belief in information flexibility to encourage innovation.	192 (39.0%)	252 (51.2%)	48 (9.8%)	0 (0%)	3.29	0.635	<b>3.22</b>
My library uses information as a support for innovation.	156 (31.7%)	288 (58.5%)	48 (9.8%)	0 (0%)	3.22	0.606	
My library encouraged information proactive to support innovation	132 (26.8%)	324 (65.9%)	36 (7.3%)	0 (0%)	3.20	0.551	
My library support information creativity to support innovation	132 (26.8%)	300 (61.0%)	60 (12.2%)	0 (0%)	3.15	0.608	
<b>Information Management</b>	(%)	(%)	(%)	(%)			
Copyright and access to information are important issues in my library	228 (46.3%)	216 (43.9%)	48 (9.8%)	0 (0%)	3.37	0.654	<b>3.27</b>
My library adopts all relevant format of information for effective information management.	204 (41.5%)	252 (51.2%)	36 (7.3%)	0 (0%)	3.34	0.610	
Importance of information source is considered in my library for effective information management.	204 (41.5%)	240 (48.8%)	48 (9.8%)	0 (0%)	3.32	0.642	
Information management is an important practice in my library	168 (34.1%)	288 (58.5%)	36 (7.3%)	0 (0%)	3.27	0.586	
My library practices information privacy and control	108 (22.0%)	300 (60.0%)	84 (17.1%)	0 (0%)	3.05	0.623	
<b>Information System Management</b>	(%)	(%)	(%)	(%)			
Information technology tools have influence information management in my library	264 (53.7%)	192 (39.0%)	36 (7.3%)	0 (0%)	3.46	0.629	<b>3.34</b>
My library uses Information Technology (IT) to support organizational process.	240 (48.8%)	228 (46.3%)	24 (4.9%)	0 (0%)	3.44	0.587	
There is high level of confidence in the use of ICTs facilities in my library	228 (46.3%)	216 (43.9%)	48 (9.8%)	0 (0%)	3.37	0.654	
Computing process is use in information management in my library	192 (39.0%)	228 (46.3%)	72 (14.6%)	0 (0%)	3.24	0.691	
My library adopts the use of library Management software	144 (29.3%)	300 (61.0%)	48 (9.8%)	0 (0%)	3.20	0.594	
<b>Overall Mean Grand Mean and S.D of nature of the information culture of university libraries in South-South, Nigeria</b>					<b>3.18</b>	<b>14.30</b> <b>5</b>	

N=492 (Source: Field Survey, 2021)

KEY: SA=Strongly Agreed, A=Agreed, D=Disagreed, SD=Strongly Disagreed, \*\*\* Decision Rule: if mean is  $\leq 1.49$  = Strongly Disagreed; 1.5 to 2.49=Disagreed; 2.5=3.49=Agreed; 3.5 to 4=Strongly Agreed.

Table 4 reveals the descriptive analysis of the prevalent information culture in university libraries in South-South, Nigeria. The result shows that the Overall Grand Mean of information culture in university libraries is Overall Grand  $\bar{x}$  = 3.18 which implies that information culture was practiced in university libraries in South-South, Nigeria. However, the result indicates that information awareness with Average  $\bar{x}$  = 3.42 was the prevalent information culture practiced in university libraries in South-South, Nigeria. Followed by information system management with Average  $\bar{x}$  = 3.34. Information communication was practiced with Average  $\bar{x}$  = 3.31. Also, information management was practiced Average  $\bar{x}$  = 3.27, while information innovation with Average  $\bar{x}$  = 3.22 was the least practiced information culture by university libraries in South-South, Nigeria.

**Table 3.** Types of Organizational Structure Adopted in University Libraries

Statements	SA (%)	A (%)	D (%)	SD (%)	Mean	S.D	Average Mean
<b>Mechanic Organizational Structure</b>							
The organizational structure of my library is highly formalized and centralized	252 (51.2%)	204 (41.5%)	36 (7.3%)	0 (0%)	3.44	0.627	<b>3.06</b>
Communication lines in my library tends to follow formal channels	144 (29.3%)	300 (61.0%)	36 (7.3%)	12 (2.4%)	3.17	0.660	
Standardization is according to work process in my library	72 (14.6%)	384 (78.0%)	36 (7.3%)	0 (0%)	3.07	0.463	
There is a strong emphasis on getting staff to adhere closely to formal job descriptions in my library	132 (26.8%)	264 (53.7%)	96 (19.5%)	0 (0%)	3.07	0.677	
There is formal control of most operations by means of sophisticated control and information for getting work done in my library	48 (9.8%)	336 (68.3%)	96 (19.5%)	12 (2.4%)	2.85	0.608	
There are high productivities in my library	60 (12.2%)	276 (56.1%)	144 (29.3%)	12 (2.4%)	2.78	0.682	
<b>Organic Organizational Structure</b>							
The organizational structure of my library is decentralized and flexible	216 (43.9%)	264 (53.7%)	12 (2.4%)	0 (0%)	3.39	0.621	<b>3.10</b>
Communication lines in my library are more fluid and flexible	168 (34.1%)	264 (53.7%)	60 (12.2%)	0 (0%)	3.22	0.645	
Standardization is according to work knowledge and end result in my library	132 (26.8%)	312 (63.4%)	48 (9.8%)	0 (0%)	3.17	0.581	
There is a tendency to let the requirements of the situation and the individual personality define proper on-the-job behavior in my library	132 (26.8%)	252 (51.2%)	96 (19.5%)	12 (2.4%)	3.02	0.749	
There is high job satisfaction in my library	96 (19.5%)	300 (61.0%)	60 (12.2%)	36 (7.3%)	2.93	0.778	
There is loose, informal control and heavy dependence on informal relationships and norm for getting work done in my library	36 (7.3%)	372 (75.6%)	72 (14.6%)	12 (2.4%)	2.88	0.550	
<b>Grand Mean and S.D of type of organizational structure adopted in university libraries in South-South, Nigeria</b>					<b>3.08</b>		

N=492 (Source: Field Survey, 2021)

KEY: SA=Strongly Agreed, A=Agreed, D=Disagreed, SD=Strongly Disagreed, \*\*\* Decision Rule: if mean is  $\leq$  1.49=Strongly Disagreed; 1.5 to 2.49=Disagreed; 2.5=3.49=Agreed; 3.5 to 4=Strongly Agreed.

Table 3 reveals descriptive analysis of organizational structure adopted in university libraries in South-South, Nigeria. The result shows that the overall Grand Mean of organizational structure adopted in university libraries is Overall Grand  $\bar{x}$  = 3.08 which implies that the respondents agreed with the statements of organizational structure formulated for this study. The Grand Mean of mechanic and organic structures are Average  $\bar{x}$  = 3.07 and (Average  $\bar{x}$  = 3.10 respectively.



This result implied that both the mechanic and organic organizational structures are adopted in university libraries in South-South, Nigeria. The result of this study also indicates that organic organizational structure was more adopted in university libraries in South-South, Nigeria.

**Table 4.** Linear Regression Analysis of Influence of Information Culture on E-library Service delivery in University Libraries

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.674	1.779		3.751	0.000
Information Culture	0.537	0.022	0.738	24.238	0.000
a. Dependent Variable: <b>E-library Service Delivery</b>					
<b>R =0.738, R Square = 0.545, Adjusted R square = 0.544, F (1, 490) = 587.464</b>					

**N=492 (Source: Field Survey, 2021)**

Table 4 indicated that information culture significantly influenced e-library service delivery in university libraries in South-South, Nigeria at  $p = 0.000 < 0.05$ . The result shows that the t-value is noted to be 24.238. The Adjusted R-Square is 0.544; this means that 54.4% of variation in information culture can be explained in e-library service delivery in university libraries. The result also shows positive slope of ( $B = 0.537$ ). The result further shows that there is positive relationship between information culture and e-library service delivery in university libraries with ( $Beta = 0.738$ ). This means that a unit increase in information culture results to 73.8% increase in e-library service delivery in university libraries. However, the significant value of 0.000 is the calculated value and it is used to compare the t-tabulated value of 0.05 (5% standard value). Since  $0.000 < 0.05$ , the null hypothesis is rejected. Therefore, the result concluded that information culture significantly influences e-library service delivery in university libraries in South-South, Nigeria.

**Table 5.** Linear Regression Analysis of Influence of Organizational Structure on E-library Service Delivery in University Libraries

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta ( $\beta$ )		
1 (Constant)	0.444	2.249		0.199	0.842
Organizational Structure	1.323	0.060	0.703	21.903	0.000
a. Dependent Variable: <b>E-library Service Delivery</b>					
<b>R =0.703, R Square =0.495, Adjusted R square =0.494, F (1, 490) = 479.753</b>					

**N= 492 (Source: Field Survey, 2021)**

Table 5 indicated that organizational structure significantly influenced e-library service delivery in university libraries in South-South, Nigeria at  $p = 0.000 < 0.05$ . The result shows that the t-value is noted to be 21.903. The Adjusted R-Square is 0.494, this means that 49.4% of variation in organizational structure can be explained in e-library service delivery in university libraries. The result also shows positive slope of ( $B = 0.537$ ). The result further shows that there is positive relationship between organizational structure and e-library service delivery in university libraries with ( $Beta = 0.703$ ). This means that a unit increase in organizational structure results to 70.3% increase in e-library service delivery in university libraries. However, the significant value of 0.000 is the calculated value and it is used to compare the t-tabulated value of 0.05 (5% standard value). Since  $0.000 < 0.05$ , the null hypothesis is rejected. Therefore, the result concluded that organizational structure significantly influences e-library service delivery in university libraries in South-South, Nigeria.

**Table 6.** Linear Regression Analysis of Influence of Organizational Structure on E-library Service Delivery in University Libraries

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta ( $\beta$ )		
<b>1 (Constant)</b>	<b>0.411</b>	<b>2.074</b>		<b>0.198</b>	<b>0.843</b>
Information Culture	0.362	0.039	0.497	9.358	0.000
Organizational Structure	0.547	0.011	0.291	5.472	0.000
<b>a. Dependent Variable: E-library Service Delivery</b>					
<b>R = 0.756, R Square = 0.571, Adjusted R Square = 0.570, F (2, 489) = 326.050</b>					

**N= 492 (Source: Field Survey, 2021)**

In order to determine the combined influences of information culture and organizational structure on e-library service delivery in South-South, Nigeria. The results in Table 6 shows that the independent variables (information culture, and organizational structure) both have positive coefficient, indicates that they both have positive influence/relationship on/with e-library service delivery ( $R = 0.756$ ;  $R^2 = 0.571$ ; Adjusted- $R^2 = 0.570$ ;  $F (2, 489) = 326,050$ ; Sig. = 0.000). The result further shows an  $R^2$  value of 0.756 which shows that the independent variables accounts for 75.6% of the variations on e-library service delivery in South-South, Nigeria.

## Discussion of Findings

### Level of E-library Services Delivered in University Libraries in South-South, Nigeria

Research question one sought to find out the level of e-library service delivery in university libraries in South-South, Nigeria. The result shows that the Overall Grand Mean of level of e-library service delivery in university libraries is  $\bar{x} = 3.09$ . The result shows that there is high level of e-library service delivery in university libraries in South-South, Nigeria. The findings of this study disagreed with Rafiq, Ameen and Jabeen (2018), Iwhiwhu and Eyekpegaha (2009) who stated that there is low e-library service delivery in university libraries especially in Nigeria. The result of this study also disagreed with Urhiewhu and Omah (2016) who conducted an empirical study to investigate the level of e-library service delivery in Taraba State University Library, Janligo and reported low level of e-library service delivery. The finding of this study further disagreed with all the four gaps formulated in this study which include understanding customers' needs, service delivery policies, service delivery and external communications.

### Prevalent Information Culture in University Libraries in South-South, Nigeria

Research question two sought to find out the prevalent information culture in university libraries in South-South,

Nigeria. The result shows that the Overall Grand Mean of information culture in university libraries is Overall Grand  $\bar{x} = 3.18$ . This result implied that information culture was practiced in university libraries in south-South, Nigeria. This finding corroborates Choo (2013) who stated that organization that practices information culture are the organizations where information is managed to encourage innovation, creativity, and the exploration of new ideas. The author submitted that most organizations should display to varying degrees norms and behaviors of information culture. The finding of this study agrees with Lauri, Heidmets and Virkus (2015) who reported that information culture was practiced in higher education institutions in Estonia because they embraced integrated information culture, pro-active information culture and informal information culture. Furthermore, the result of this study is in line with Kidi, Kanigoro, Salman, Lokaadinugroho, and Sukmandhani (2017) who discovered high level of information culture of players using the educational game "Merah Putih". The result of this study further confirm that organizational information culture is imperative in the library setting especially on identifying the dominant current and preferred organizational information culture type of the academic libraries toward library culture change and improving effectiveness.

### Types of Organizational Structure Adopted in University Libraries in South-South, Nigeria

Research question four sought to find out the types of organizational structure of university libraries in South-South, Nigeria. The result shows that the Overall Grand Mean of organizational structure adopted in university libraries is  $\bar{x} = 3.08$ . The Average Mean of mechanic and organic structures are Average  $\bar{x} = 3.07$  and Average  $\bar{x} = 3.10$  respectively. This result implied that both the mechanic and organic organizational structures are adopted in university libraries in South-South, Nigeria. The result of the study corroborates Shields (2016) who identified mechanic and organic structures as the two main organizational structures adopted in modern organizations. The result of this study further confirmed

that both the mechanic and organic organizational structure can be adopted by an organization at a time depending on the situation on ground.

### Conclusion and Recommendations

The study concluded that information culture and organizational structure are crucial to e-library service delivery in university libraries in South-South, Nigeria. Based on the findings of this study, two major factors were identified to influence e-library service delivery in university libraries. These factors are information management factors (information culture) and organizational factors (organizational structure). The finding of this study shows that university libraries nature of information culture is a significant determinant of their degree of e-library service delivery. Also, organizational structure was also found to play a significant role in determining university libraries degree of e-library service delivery. Finally, the findings of this study indicated that information culture and organizational structure jointly influence e-library service delivery in university libraries in South-South, Nigeria.

Based on the findings of this study, the following recommendations were made:

1. The management of university libraries should intensify efforts to ensure continues improvement of e-library service delivery in South-South Nigeria.
2. The management of university libraries should encourage information innovation and information management to ensure continue improvement of e-library service delivery in university libraries.
3. The management of university libraries should adopt the best organizational structure (organic and mechanic) suitable at a particular period of time for effective and efficient e-library service delivery in university libraries. This is to ensure that the best organizational structure is adopted for continue improvement of e-library service delivery in university libraries.

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