# INFLUENCE OF ICT COMPETENCIES ON JOB PERFORMANCE AMONG LIBRARY PERSONNEL IN TERTIARY INSTITUTIONS IN LOKOJA, KOGI STATE, NIGERIA

**By**

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**Abstract**

*The study sought to find out the influence of ICT competencies on the job performances of library personnel in three higher institutions in Lokoja Kogi State, which include Federal University Lokoja Library, Kogi State Polytechnic Library and Salem University Library. In order to achieve the objectives of the study, four research questions were raised and answered. These questions were on the types of ICT skills possessed by library staff, level of ICT competency of library staff, level of influence of ICT competency on job performance of library staff and factors that contributes to ineffective ICT competency for effective job performance of library staff. Survey method was adopted for the study and copies of a structured questionnaire were used for data collection from 100 respondents. Seventy two (72) responses were received giving a response rate of 72%. Data collected were analysed using frequencies and percentages. The findings of the study showed that the library staff in the institution studied possessed computer skills, use of e-resources/multimedia, research skills, and automation and digitization. Also, majority of them acquire their skills in computer/ICT training centers and through on-the-job-training. Hence, ICT competency enabled them to meet up with the demands of their job, thereby, providing library services such as e-library/multimedia services, circulation services, research and bibliographic services and other library services. Therefore the findings of this study revealed that the level of ICT competence of library staff significantly enhanced their job efficacy and performance. Premised on these findings, it was recommended that library personnel in higher institutions in Lokoja, Kogi State, need possess advanced ICT skills so to be able provide advanced technological information services to their various communities. Furthermore, to enhance the level of influence of ICT competency on job performances, every library personnel should be engaged in ICT related jobs which will in turn, boost work efficiency and effective library service delivery.*

## Introduction

*"Library is a growing organism"* as stated by Ranganathan in Kumar (1991); as libraries grow, changes are inevitable. Changes sweeping across libraries have never been as pronounced as seen in recent times with the advent of ICT applications. Academic libraries which are libraries established in higher institutions have always been regarded as the nerve centre of these institutions as they are responsible for supporting the teaching, research and other academic programs of their parent institutions. Academic libraries are passing through a phase of great transition being influenced greatly by technological developments. Technologies have created a new service environment that has pushed conventional boundaries much farther, providing more opportunities for effective information work and effective service delivery. This new service

environment necessitated the need for academic libraries to shift their focus from traditional activities of collecting, processing, storing and accessing information to offer customer-centered automated information services, generated by using online/offline databases, e-resources, e-journals, networks and consortia. Today, majority of the libraries are using computers and latest ICT tools and techniques for performing various house-keeping jobs such as, acquisition, processing, and serial control and also for delivering various computerized services to the users. Personnel working in such libraries need continuous grooming by acquiring core competencies and new skills so as not to become redundant in this fast changing environment (Singh & Pinki, 2009). Librarians now act as the knowledge navigators and change facilitators to fulfil the clientele's specialized needs, as this has become essential to use cutting edge technology tools and techniques (Ajeemsh & Margam, 2012). The librarians as information professionals of today need to be ICT competent in order to enhance job performance and to optimize the use of the libraries resources by users to satisfy their information needs. Hay Group (2004) point out that an organization's best source of competitive advantage lies with its employees. Strategies, business models, products and services can all be copied by competitors, but talented and competent employees represent a sustainable source of differentiation.

The concept ICT-competency connotes an integrated set of knowledge, skills and attitudes for functional use of ICT in an educational context. APLEN (2008) defined ICT competencies for library professionals as a combination of skills, knowledge and behaviours related to library technology and are important for organizational success, personal and job performance as well as career building.

**Job performance has been defined as the overall expected value from employees' behaviours carried out over the course of a set period of time** (June & Mahmood, 2011). Job performance relates to the act of doing a job. It is a means to reach a goal or set of goals within a job, role, or organization. It is viewed as the work related activities expected of an employee and how well those activities were executed. Many top management personnel and directors assess the job performance of each employee on an annual or quarterly basis in order to help them identify suggested areas for improvement. Job performance assesses whether a person performs a job well because performance is an important criterion for organizational outcomes and success (Vazirani, 2010).

## Statement of the Problem

Since the advent of ICT in library and information work, the issue of skills acquisition and competency in the use of ICTs for effective library service delivery became very significant among library personnel in the global information age. Today, nearly all services of libraries and information centres are automated and will demand a great deal of ICT competency to enhance job performance effectively. Most academic libraries in Lokoja, Kogi State, are undergoing automation process. Even though some of the library personnel possess basic computer skill, many library personnel in these institutions are still inefficient in ICT skills necessary for the 21st century library service delivery, as many of them still continue to carry out the usual traditional library services which are supposed to be gradually fading away. Without ICT competency, such library personnel are incapable of performing maximally in the changing work environment and may become irrelevant in the system (Abbas, 2014). In as much as being ICT competent is important, but how it translates to job performances of library staff in terms of service delivery is very important. Hence, the need to acquire and continually upgrade ICT skills by library staff for effective library service delivery in the 21st century becomes very imperative. This paper therefore explores the influence of ICT competence on job performance among library personnel in academic libraries in Lokoja Kogi State, Nigeria.

## Research Questions

The following research questions guided the study:

1. What are the types of ICT skills possessed by library staff in tertiary institutions in Lokoja, Kogi State?
2. What is the level of ICT competency possessed by library personnel in tertiary institutions in Lokoja, Kogi State?
3. What is the level of influence of ICT competency on job performances of library staff?
4. What are the factors contributing to inefficient ICT competencies for effective job performances?

## Literature Review

In any field of study, the existing literature constitutes a base on which all further research is carried out. The literatures reviewed for this study is divided into the following subheadings; information and communication technology and librarianship, influence of ICT competency on job performance and the need for ICT competency by librarians.

**Information and Communication Technology in Librarianship**

Information and communication technology (ICT) has changed the landscape of libraries and librarianship. Libraries are being transitioned from the four walls to the cyber environment. Library resources are being transformed from print to digital and web resources. As a result of the complex dynamic global educational system, libraries have to change themselves to excel. For this, it has become essential to provide services based on cutting edge technology using latest tools and techniques (Singh & Pinki 2009). Therefore, the era is over when academic librarians were involved in housekeeping jobs like classification and cataloguing, etc. Now they have to act as the knowledge navigators and change facilitators to fulfil the clientele's specialized needs. Ab, (2012) affirmed that the increase role of technology in libraries has a significant impact on the changing roles of librarians, as new technologies are dramatically increasing the accessibility of information and libraries and librarians will have to adopt to meet the evolving needs of users that are emerging. There is no doubt that significant changes have taken place in libraries in the developed world due to the application of ICT in automated cataloguing, circulation systems, online information retrieval, electronic document delivery, and CD-ROM databases (Eguavoen 2011). Therefore, almost every function carried out in a library has been altered to some extent by advances in electronics, computerization and telecommunications. Thanuskodi (2011) also contended that the manner in which libraries process, store and retrieve information is changing, as is the information medium itself. Likewise, today's libraries are in transition from manual to electronic systems. Databases are replacing card catalogues and printed indexes. Information is being produced and stored in new formats.

The use of ICT is growing in Nigerian libraries. Lee, in Popoola (2002), asserted that microcomputers will create remarkable changes in the nature of professional work, underscoring the widespread fear and negative attitudes that have slowed the progress of ICT implementation. This is because implementing and using ICT in the library depends largely on the skills and attitude of library staff toward this digital age. Furthermore, Okiy (2013) reviewed the state of ICT application for information provision in Nigerian university libraries. It was revealed that the obstacles militating against effective application of ICT in the university libraries were inadequate funding, inadequate electricity supply, and shortage of competent manpower for operation and maintenance of ICT facilities.

**ICT Competency and Job Performance**

Competencies are useful in order to enhance performance at work. Mart (2013) defined competency as personal characteristics such as: skills, knowledge and attitudes, which an individual possesses or need to acquire in order to perform an activity within a specific context. Rowe (2007) also defines competency as a set of knowledge, skills, attitudes, and values that are needed to effectively perform an occupation or a productive role. Linking this concept to ICT competencies, it refers to a group of skills, knowledge and attitudes that are applied to the use of information and communication systems, as well as the devices that the activity involves. Therefore, (ICT) competency is defined as the knowledge and ability to use computers and related technology efficiently, with a range of skills covering levels from elementary use to programming and advanced problem solving. Vazirani (2010) opined that competencies and individual characteristics predicted successful job performance. Adeleke and Olorunsola (2010) confirmed that ICT competency correlates with job performance, which can be measured and enhanced through training. Similarly, study by Batool & Ameen (2010) found that there is a positive relationship between competency and job performance as competency contributes to the high levels of performance between individuals as well as the organization. Ajeemsha (2012) and Ayoku and Okafor (2015) provided a list of ICT competencies for library professionals which include basic computer competency, automation skills, use of e-mails, word processing, web design and internet skills, database management and database searching skills, virtual reference services, troubleshooting and maintenance skills, etc.

Job performance has always been regarded as important factor in employee management. Job performance has been associated with the ability of the individual employees realizing their respective work goals, fulfilling expectations as well as attaining job targets and/or accomplishing a standard that are set by their organizations (Armstrong 2006). Most people will immediately define job performance as what a person does at work and at different stages of job, as well the complexity of a job can affect the overall performance of the job holder. Sarmiento & Beale (2007) saw job performance as the result of two elements, which consist of the abilities and skills (natural or acquired) that an employee possesses, and his/her motivation to use them in order to perform a job better. Since libraries today are technologically driven, it becomes imperative that for library staff to succeed in this career, they must be efficiently competent in library technologies for effective service delivery.

**The Need for ICT Competency for librarians**

The re-engineering of the teaching and learning framework in line with ICT use is in a progressive stage in academic institutions worldwide. This provides a window of opportunity for academic libraries to demonstrate their existing and potential contribution to educational change. ICT in libraries has also changed the mode of information storage and retrieval, acquisition, cataloguing and classification, circulation of materials, serials control, management statistics and administrative activities such as budgeting (Okoye, 2013; Seena & Pillai 2014). This achieved the provision of more efficient information services to the users and the overall improvement in the performance of the libraries and other related information institution. Libraries have been transformed into information centers, formal tools and techniques have been replaced by the modern technologies. ICT has become an integral part of the modern libraries (Emiri, 2015).

In this era of globalization, it becomes imperative for librarians to acquire relevant skills and be competent in the application of the skills to the use of ICT in their profession. Shibanda (2001) opined that the information manager especially academic librarians must build on the positive aspect of information era. For librarians to move forward in relevance and for libraries to provide services to the increasingly demanding users, they must acquire relevant skills and competences in the use of ICT.

The tasks of the library professionals today have become more complex and involve both disciplinary and other competences. Khoo (2005) emphasized that library and information professionals are also IT professionals to some degree. This blending will help them harness technology and information products for greater efficiency in their service delivery. According to Abbas (2014), library automation and its attendant digital technologies have presented new opportunities and challenges to libraries to enhance their services. Hence, some of the cultural functions of libraries are changing in the digital age by providing flexible and more efficient opportunities for the acquisition, organization, and bibliographic control of the available information and knowledge. Therefore, it becomes imperative for librarians and documentalists to be conversant with development in ICTs to enhance the organization and dissemination of information in order to satisfy users need and increase knowledge. Furthermore, Gbaje (2007) noted that the implication of transporting library services to the online environment for the Nigerian academic libraries in the digital age are enormous particularly with the dynamic nature of digital technology which is constantly creating the need for new skills, work environment and work methods since librarians are the link between the information and the users. Consequently,

librarians can no longer be simply information providers or the 'keepers of knowledge, but they are expected to be information controllers, organizers, advisers, and consultants. The skills of librarians should link to the technological infrastructure.

**Methodology**

A survey design was used for this study. The population for the study includes library staff in academic libraries in Lokoja, Kogi State, namely: Federal University Lokoja, Kogi State Polytechnic and Salem University. Federal University Lokoja has 30 consisting of 15 professional librarians, 3 paraprofessionals and 11 non-professionals 40. Kogi State Polytechnic has 40 library staff consisting of 15 professional librarians, 14 pare-professionals and 9 non-professionals; while Salem University library has 30 staff consisting of 7 professional, 11 Para-professionals and 12 non-professional staffs. The total population is 100. The entire population was used for the study because the population is moderate and manageable and also makes generalization easy. Hence, no sampling was done for the study. In gathering relevant data on ICT competences of library staff/professionals, a structured questionnaire consisting of open and close ended questions was designed, and interview method was also adopted for collection of data. The questionnaire was formulated keeping in view, the objective of the study and personally distributed and collected with constant personal pursuance and the data obtained were later classified, analysed, tabulated and logically interpreted.

**Results and Data Analysis**
**Table 1: Response Rate**

| **Institutions** | **No. of Questionnaires Distributed** | **Percentage of Questionnaires Distributed** | **Questionnaire Returned** | **Percentage of Questionnaire Returned** |
|---|---|---|---|---|
| Federal University Lokoja | 30 | 30% | 25 | 25% |
| Kogi State Polytechnic | 40 | 40% | 32 | 32% |
| Salem University | 30 | 30% | 15 | 15% |
| **Total** | **100** | **100%** | **72** | **72%** |

Table 1 shows that out of the population of 100 staff, 72 of them responded to the questionnaire distributed of which 25(25%) are from Federal University Lokoja, 32(32%) from Kogi State Polytechnic and 15(15%) from Salem University Lokoja, making 72% response rate.

Table 2: Library Staff Status **N=72**

| **Status** | **FUL** | **KSP** | **Salem University** | |
|---|---|---|---|---|
| Professional | 14 (19.4%) | 11(15.3%) | 3(4.2%) | |
| Para-professional | 3(4.2%) | 12(16.7%) | 7(9.7%) | |
| Non-Professional | 8(11.1%) | 9(12.5%) | 5(6.9%) | |
| **Total** | **25(34.7%)** | **32(44.5%)** | **15(20.8%)** | **100%** |

Analysis in Table 2 show the staff status of library staff of the institutions studied. It reveals that even though Kogi State Polytechnic library has the highest number of staff with 11(15.3%) professional librarians, 12(16.7%) paraprofessionals and 9(12.5%) non-professionals, Federal university Lokoja has the highest number of professional librarians 14(19.4%), and the lowest number of para-professionals 3(4.2%). Salem University had the lowest staff members with just 3(4.2%) professional librarians.

Table 4: ICT Competencies of Library Staff **(N=72)**

| **ICT Skills** | **Highly Skilled** | **Skilled** | **Not Skilled** |
|---|---|---|---|
| Basic Computerising (M.S. Word) | 57(97.2%) | 9(12.5%) | 6(8.3%) |
| Research Skills (Use of Internet, Databases, etc.) | 53(73.6%) | 13(18.1%) | 6(8.3%) |
| Automation and Digitization Skills (use of library software, Scanning and Uploading) | 51(70.8%) | 13(18.1%) | 8(11.1%) |
| Presentation skills (power point) | 49(68.1%) | 13(18.1%) | 10(13.9%) |
| Web 2.0/Lib 2.0 Skills (i.e., blog creation and maintenance, etc.) | 48(66.7%) | 15(20.8%) | 9(12.5%) |
| Technical skills (Repair/Maintenance/ Software Installation skills) | 44(61.1%) | 22(30.6%) | 6(8.3%) |
| Use of electronic resources/Multimedia | 55(76.4%) | 10(13.9%) | 7(9.7%) |

Table 4 show the ICT competencies of respondents. It reveals that the respondents are highly skilled mostly in basic computerising 57(97.2%), use of e-resources/ multimedia

55(76.4%), research skills 53(73.6%) and automation/digitization skills 51(70.8%). The least is technical skills with 44(61.1%).

Table 5: **Distribution of ICT Skills acquired by the Respondents N=72**

| **Places for ICT skill Acquisition** | **Respondents** | **Percentage** |
|---|---|---|
| Computer/ICT Training Centre/Cyber café | 29 | 40.3% |
| Library Schools | 6 | 8.3% |
| On the-job Training | 15 | 20.8% |
| Personal Practice | 11 | 15.3% |
| Additional University Qualification in Computer | 3 | 4.2% |
| Workshop/Seminars/Conferences | 8 | 11.1% |

Table 5 shows that most of the library staff represented by 29(40.3%) acquire their ICT skills in computer/ICT training /cyber cafes, while 15(20.8%) respondents acquired ICT skills through on-the-job training, 11(15.3%) of them acquire their skills through personal training. Whereas 8(11.1%) acquired ICT skills through workshops, seminars and conferences and 6(8.3%) from library schools, only 3(4.2%) of the library staff had additional university qualification in computer or ICT.

**Table 6: Library Services Provided Electronically N=72**

| Library Services | Yes | No | Undecided |
|---|---|---|---|
| [Technical] Cataloguing and Classification | 58(80.6%) | 9(12.5%) | 5(6.9%) |
| Collection development | 44(6.1%) | 22(30.6%) | 6(8.3%) |
| Reference Services | 48(66.7%) | 13(18.1%) | 11(15.3%) |
| Serials | 34(47.2%) | 35(48.6%) | 3(4.2%) |
| Circulation Services | 64(90.2%) | 4(5.6%) | 3(4.2%) |
| Current Awareness Services | 50(69.4%) | 13(18.1%) | 9(12.5%) |
| E-library/Media services | 65(90.3%) | 5(6.9%) | 2(2.8%) |
| Bindery Services | 30(41.7%) | 38(52.8%) | 4(5.6%) |
| Administrative Duties | 65(90.3%) | 5(6.9%) | 2(2.8%) |
| Research and Bibliographic Services | 60(83.3%) | 7(9.7%) | 5(6.9%) |
| Digitization and retrospective conversion services | 58(80.6%) | 10(13.9%) | 4(5.6%) |

On the types of library services provided using ICTs, Table 6 shows that the respondents agreed that they use ICTs for administrative and e-library/media services 65(90.3%), circulation services 64(90.2%), research and bibliographic services 60(83.3%), [technical] cataloguing and classification services and digitization/retrospective conversion services 58(80.6%) respectively and current awareness services 50(69.4%). The least is bindery service, which uses more of technical and mechanical tools than ICT devices.

**Table 7: Level of influence of ICT Competencies on Job Performances N=72**

| Level of Effectiveness | Respondents | % |
|---|---|---|
| Very Positive | 22 | 30.6% |
| Positive | 39 | 54.2% |
| Negative | 11 | 15.3% |
| **Total** | **72** | **100%** |

Table 7 above shows the influence of ICT competencies on job performance of library staff. It is clear from the table that ICT competency had positive influence on the job performances of library staff 39(54.2%). Only 11(15.3%) respondents indicated that ICT competencies have no influence on their job performance.

Table 8: Factors Contributing to Inefficient ICT Competencies for Effective Job Performances **N=72**

| **Factors** | **Agree** | **Disagree** | **Undecided** |
|---|---|---|---|
| Inadequate ICT facilities | 48(66.7%) | 19(26.4%) | 5(6.9%) |
| Inaccessibility to ICT facilities | 27(37.5%) | 30(41.7%) | 15(20.8%) |
| Lack of training and retraining programmes | 48(66.7%) | 19(26.4%) | 5(6.9%) |
| Negative attitude of library staff | 42(58.3%) | 23(31.9%) | 7(9.7%) |
| Financial incapability for private training | 46(63.9%) | 14(19.4%) | 12(16.7%) |
| Age | 34(47.2%) | 36(50.0%) | 2(2.8%) |
| Epileptic power supply | 35(63.8%) | 28(27.8%) | 9(8.3%) |
| High cost of ICT | 31(48.6%) | 29(40.3%) | 12(16.7%) |
| Poor exposure to ICT related jobs | 47(65.3%) | 13(18.1%) | 12(16.7%) |
| Technophobia | 33(45.8%) | 35(48.6%) | 4(5.6%) |

From Table 8, the respondents indicated the major factors responsible for Inefficient ICT competencies for effective job performances, which includes lack of training and retraining programmes and inadequate facilities with 48(66.7%) respondents respectively, poor exposure to ICT related jobs 47(65.3%), financial incapability for private training and negative attitude of library staff 42(63.9%).

**Table 8: Strategies for Enhancing ICT Competencies for Job Performance N=72**

| **Strategies** | **Agree** | **Disagree** | **Undecided** |
|---|---|---|---|
| Training and Retraining | 68(94.4%) | 4(5.6%) | 0(0%) |
| Engagement of staff in ICT related jobs | 67(93.1%) | 4(5.2%) | 1(1.4%) |
| Adequate Funding | 68(94.4%) | 4(5.6%) | 0(0%) |
| Aggressive Infrastructural Development | 67(93.1%) | 5(6.9%) | 0(0%) |
| Encouraging Personal practice | 63(87.5%) | 5(6.9%) | 4(5.6%) |
| Workshop, Seminars and Conferences | 62(86.1%) | 5(6.9%) | 5(6.9%) |

Table 8 shows that the strategies for enhancing ICT competencies for job performance by library staff includes training and retraining programmes and adequate funding 68(94.4%),

aggressive infrastructural development and engagement of staff in ICT related duties 67(93.1%), encouraging personal practice 63(87.5%) and attending workshops, seminars and conferences 62(86.1%).

**Findings**

1. The library personnel in tertiary institutions in Lokoja possess basic computer skill, use of e-resources/multimedia skills, research skills and automation/digitization skills.
2. The library personnel are highly competent in basic computerising skill, use of e-resources/ multimedia skills, research skills and automation/digitization skills.
3. ICT competency had positive influence on the job performances of library personnel
4. The major factors contributing to inefficient ICT competencies for effective job performance of some personnel include lack of training and retraining programmes, inadequate facilities, poor exposure to ICT related jobs, financial incapability for private training and negative attitude of library staff.

**Discussion of Findings**

This study revealed that library personnel in the institutions studied possess basic computer skills, use of e-resources/multimedia, research skills and automation and digitization skills to a very high level. This is in line with the view of Okafor (2015) who noted that library personnel must be very competent in basic computer competency, automation/digitization skills, database management and database searching skills, research skills, use of e-mails, and other relevant skills. Also, majority of them acquire their skills in computer/ICT training centers and through on-the-job- training. The acquisition of appropriate ICT competence enabled them to meet up with the demands of their job, thereby, providing library services such as e-library/multimedia services, circulation services, research and bibliographic services, digitization services/retrospective conversion services, technical services and the application of ICT to enhance administrative duties. Hence, it was evident from the findings that ICT competency had positive influence on job performances of library staff. These findings agree with the Findings of Adeleke & Olorunsola (2010) and Batool & Ameen (2010) who reported that ICT competency correlates with job performance, which can be measured and enhanced through training. In their study, they discovered that there is a positive relationship between technological competency and job performance as competency contributes to the high levels of performance between individuals as well as their organizations.

The finding also revealed that lack of training and retraining programmes, inadequate ICT facilities, poor exposure to ICT related job, lack of fund for private training and the negative attitude of some staff contributed to the inefficient ICT competency of some library staff. However training and retraining programmes, adequate funding by management, engagement of staff members in ICT related duties and aggressive ICT infrastructural development are the strategies suggested by the respondents. Emiri (2015), Seena & Pillai (2014) and Okoye (2013) emphasized that the factors responsible for inefficient skills must be checked and corrected so as to enhance effective service delivery. To provide advanced technological information services, they must develop an urge to learn and explore new technological stuff. Library professionals need to be given thorough exposure through, training and retraining programmes via sponsorship to continuing education programmes, workshops and conferences. Academic libraries must also embark on infrastructural development and ensure a conducive digital library environment.

**Conclusion**

Based on the findings of this study, it could be concluded that most library personnel possess the basic kind of ICT expertise which is required to automate their library. Furthermore, ICT competency had a positive influence on job efficacy and performance of most library personnel hence most library services are now ICT-driven. Hence, it is imperative to emphasis that the job efficacy of most library personnel, especially in a hybrid academic library environment which is found in Institutions in Lokoja, kogi State is a function of their level of ICT competence. Hence, any library and information professional that wants to be very relevant in the library and information profession, especially in a higher institution of learning must be ICT competent.

**Recommendations**

Based on the findings, the following recommendations are proffered:

1. Library Personnel in higher institutions in Lokoja, Kogi State, need possess advanced ICT skills in order to be able provide advanced technological information services to their various communities.
2. To improve the level of ICT competency among library personnel, the management of the various institutions should encourage and sponsor their library personnel to attend various forms training within and outside the country, so as to help update their knowledge and skills in application of emerging technologies for effective library service provision.

3. To enhance the level of influence of ICT competency on job performance, every library personnel should be engaged in ICT related jobs which will in turn, boost work efficiency and effective library service delivery.
4. To overcome the factors contributing to inefficient ICT competencies, higher institutions in Lokoja should ensure that training and retraining programmes for library personnel and ICT infrastructure development projects in their libraries are well funded.

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