

**APPLICATION OF ICT IN TEACHING INFORMATION ORGANIZATION IN
NIGERIAN LIBRARY SCHOOLS FOR SUSTAINABLE DEVELOPMENT: A
COMPARATIVE STUDY**

Ukpanah, Mercy E.

University of Uyo Library, University Of Uyo, Uyo, Akwa Ibom State, Nigeria

Enang, Uduak U.

Department of Educational Technology and Library Science
University Of Uyo,Uyo, Akwa Ibom State, Nigeria (52001)

ABSTRACT: *This study investigated the application of Information Communication Technology (ICT) in teaching of Information Organization in Nigerian Library schools for sustainable development. It was a comparative study of library schools in Nigeria. Four objectives and four research questions were formulated to guide the study. Descriptive survey design was employed in the study and questionnaire was used to gather data from postgraduate students in the Nigerian library schools. The findings from the study revealed that there is not enough time allocated to the teaching of Information organisation in Nigerian Library Schools. All the ICT facilities listed in the study : CD-ROM, interactive white board, projectors, DDC Online, Online LCSH, internet and computers are not used in the teaching of Information Organisation in Nigerian Library Schools. Factors that militate against the use of ICT in teaching of Information Organisation were identified as funding, lack of internet subscription, poor power supply and non-availability of the ICT resources in the library schools. It was recommended that more credit hours should be allocated for the study of Information Organisation and all the needed ICT facilities should be provided in the library schools.*

KEYWORDS: information organization, web resources, cataloguing, classification, library schools

INTRODUCTION

The teaching of information organization (cataloguing and classification)is an important part of librarianship and library education because this is one of the most significant skills for organizing information in libraries, be it manual or online. Cataloguing is and will continuously be regarded as the most important skill for organizing information even in this technology era in the training of librarians Smith, Stieg & Clark (as cited in Cloete, Snyman & Cronje, 2003). Bearman (as cited in Cloete, Snyman & Cronje, 2003) are of the opinion that traditional skills associated with acquiring, organizing and disseminating information will still be needed by tomorrow's information professional at the entry level.

The importance of information organization cannot be overemphasized as Yusuf (2014) describes it as the heart and soul of librarianship which no student can graduate without being taught. This course from the inception were taught manually in library schools, the introduction of ICT changed the way and manner in which its being taught presently, though many library schools in Nigeria still teach the courses manually.

A library school or library and information school according to Yusuf (2014) is the department of library and information science in a tertiary institution with specialization in the training of librarians and information scientists. This department in the various tertiary institutions is expected to present a sound educational experience and interest for the course to be promoted. This is the period that the students would be exposed to the fun of cataloguing and they are expected to also be taught online.

With the development in the information age, Information and communication Technology (ICT) offers knowledge based organization that handles information acquisition, organization, dissemination, and preservation. It is evident that ICT has become a key source which marimates teaching, learning, and research. Information organization refers to the process of making a bibliographic details such as full title, sub-title, half-title, author(s), place of publication, publisher, date of publication, series entry, physical description (number of pages, size of the material) and the terms of availability: International Standard Book Number (ISBN), International Standard Serial Number (ISSN) for serial publications. This process is complete with the classification which has to do with the grouping of the information resources according to their subject areas and the assignment of a call number. However, Adeleke and Olorunsola (2010) assert that for libraries to function effectively in the present age, the manual processes or methods will have to give way to information and communication technologies (ICT) and a computer driven environment. This study seeks to examine the use of ICT facilities in the teaching of information organization in library schools in Nigeria.

LITERATURE REVIEW

Library and information science curriculum is designed to develop the practical skills in future librarians in local, national and international levels. This is to prepare them for effective service delivery in any type of the library be it academic, school, public, special, national or information centres. To this end, information organization is the core of all the courses taught in library schools. For without it, there is no librarianship. It is taught in different course titles as cataloging and classification or information organization. This is one of the challenging courses in the curriculum for the lecturers and the students as noted by Cloete, Snyman & Cronje (2003), lecturers time is restricted to lecturing periods and students do not have enough time to facilitate all required practical sessions effectively. This is a true situation in our library schools.

Information organization is a complex subject, and learning cataloging can be difficult because students are introduced to a wealth of complex content. Students learn not only cataloging theory, but also how to apply cataloging standards to create descriptive records. Cataloging educators must be selective when choosing course content and learning activities because there is a limit to how much cataloging students can perform in one course. The pacing and mastery of a cataloging course must be considered carefully. Content should be introduced in a way that allows students to build cataloging skills without overwhelming them with work.”

The significant role played by the lecturers in teaching these courses with ICT facilities cannot be re-emphasized in the information age that Library and Information Science education has been re-conceptualized. Priti and Jorosi (2017) rightly observed that Information Technology (IT) has conspicuously influenced and changed LIS curriculum. In observing the part of library schools in the preparation of cataloguers for future tasks, Bothmann (as cited in Yacoob and Bowen-Chang, 2011) observed that the academic programmes do not adequately prepare cataloguers to enter the world of work. This is in line with Hill (2004) observation that most library schools offered at most two cataloguing courses and the first is increasingly not a cataloging course *per se*, but instead a kind of cataloging appreciation course, sporting a name like Introduction to the Organization of Knowledge. This is a common situation in Nigeria’s library schools.

Cataloguing and classification is a foundation course so, if it is taught only at the postgraduate level only a notable librarian and not a cataloguer will be produced thus Library schools are training half-baked librarians who are fully equipped with the cataloguing and classification skills.(Yacoob and Bowen-Chang (2011).

This is why it is important that LIS students must be continually prepared and retrained with the knowledge and the skills of the changing information environment and this must be brought to bear in the delivery of their training programmes. The primary concerns of cataloging education in the late nineteenth and early-to mid-twentieth centuries were the period dedicated for the topic and the balance between theory and practice. However, Connaway (1997), Olson (1997) and Snow and Hoffman, (2015) added that effectiveness of the lecturer and adequate credit load could enhance effectiveness in the teaching of information organization.

LIS students need more practice, more involvement from cataloging professionals, and more hands-on experience using library systems, utilizing cataloging tools and creating bibliographic records in their cataloging courses. The world has become a global village through the use of the Internet. This affects all facets of life including information organization in libraries and library schools. This integration pave way for the use of Online Computer Library Centre (OCLC) (Union Catalogue) which is a union catalogue has classification numbers of Dewey Decimal Classification Scheme (DDC) and Library

of Congress (LC) which are the most widely used schemes in libraries; LC Classification Web which a web version of LC schedules. It is a full-text schedule and subject headings of what the manual contains; DDC Online, an electronic version of DDC that enhances print updates with online delivery; Cataloguing calculator, allows searching and displaying of LC Cutter, Geographic Cutter, Geographic Area Code, Country and language codes, AACR2 abbreviations and MARC variable fields information; Online LC Schedule and Online LC Subject Heading. These online tools are not quite different from the manual tools, the difference is in the ease of use and non-duplication of the operations. All these are tools necessary for the training of LIS students for sustainable development in the 21st century. Ocholla, Ocholla, Olson, Glover and Guimarães (2015) observed that the use of these tools gives satisfaction to the students because it enhances navigation through the resources and creation of metadata and full descriptive records with access points which is quite exciting and interesting.

Information organization according to Ocholla, et al (2015) faces many challenges which include the hands on application of those principles that professionals often believe to be essential. This is related to the fact that there may not be ICT facilities and web resources in the schools for the students to use. Glaviano (2000) observed that though the use of web resources in teaching information organization is complicated mostly for the information illiterate students and instructors, the continuous use of these tools by both the instructors and the learners has a proper direction for future development in the subject area.

Statement of the problem

Information organization is an integral part of library routine and services. These courses are taught in library schools to prepare future librarians for the task ahead. Recently, there is a paradigm shift in the role of libraries, from the provision and dissemination center for printed publications towards becoming an intermediary for traditional materials to web based service based on digital information resources. Information resources come in various format - printed, audio, video, multimedia and electronic. Olaore, (2014) observed that the use of new information technology can serve three main functions in the national educational growth. These are to: deliver all or parts of the learning experiences to learners; supplement and extend content provided in different forms other than printed (hard copy); and provide a two-way channel of communication for exchange between lecturers and students with their peers for feedback or for learning, problem solving, advice, and reports. More so, the use of technology, particularly online tools, has become an increasingly important component of coursework in library schools and training sessions for library staff in the information age. Unfortunately, this seems to pose serious problems for both staff and students in Nigeria's library schools as little or no training is done on cataloguing using ICT. This work therefore seeks to find out the extent of ICT use in the teaching of course Information Organization in Nigerian library schools.

Purpose of the study

The purposes of the study are:

1. To find out the number of information organization courses taught and hours allocated to the course in library schools
2. To find out the ICT facilities used in the teaching of Information Organization in library schools.
3. To find out the extent of utilization of these resources in the Teaching of Information Organization.
4. To find out the factors that militate against the use of ICT facilities in the teaching of Information Organization

Research Questions

1. What are the number of Information Organization courses taught and hours allocated to the course in library schools?
2. Which ICT facilities are used in the teaching of Information Organization in library schools?
3. To what extent are the ICT facilities used in the teaching of Information Organization?
4. What are the challenges of using ICT facilities in the teaching of Information Organization

METHODOLOGY

The study employed descriptive survey design. Four library schools in Nigeria namely: Universities of Uyo and Calabar, Nnamdi Azikiwe University, Awka and Michael Okpara University of Agriculture, Umudike were purposively used for the study. Questionnaire was the main instrument for data collection and was administered on the Postgraduate students of the schools who served as the population and sample. The data gathered were analyzed using descriptive statistics and charts.

Data Analysis

Research Question 1: What are the number of courses and hours in which Information Organization (IO) is taught in schools?

Table 1: Number of Courses and hours in which Information Organization (IO) is taught in Library Schools

University of Uyo(UNIUYO)		University of Calabar (UNICAL)		Nnamdi Azikiwe University Awka (NAUA)		Michael Okpara University of Agriculture, Umudike(MOUAU)	
Course Code/Title	C H	Course Code/Title	C H	Course Code/Title	CH	Course Code/Title	C H
LIS 112: Introduction to Cataloguing and Classification	3	LIS 160: Organisation of knowledge 1	2	LIS 206: Technical Services in Library and Information Centres	3	LIS II4: Organisation of knowledge 1	2
LIS212: Information Organisation 1	3	LIS 265: Introduction to Cataloguing and Classification 11	2	LIS 207: Information Organization I	3	LIS 121: Organization of Knowledge II	2
LIS 321: Information Organization II	3	LIS 465: Principles of Cataloguing and Classification (practical)	2	LIS 301: Organization of Knowledge II	3	LIS 418: Classification and Subject Heading	2
LIS 327: Cataloguing and Classification of Non book Information Resources	2	-	-	-	-	LIS 423: Cataloguing and Classification of Non-book Material	2
	11		6		8		8

As shown in Table 1 University of Uyo teaches information organization in four semesters with a total of eleven (11) credit hours; University of Calabar teaches Information Organization in three semesters with a total of six(6) credit hours; Nnamdi Azikiwe University, Awka teaches information organization in three (3) semesters with a total of nine (8) credit hours; Michael Okpara University of Agriculture Umudike teaches Information Organization in four (4) semesters with a total of eight (8) credit hours.

Research Question 2: Which ICT facilities are used in the teaching of Information Organization in library schools?

Table 2: Facilities are used in the teaching of Information Organization in library schools

ICT FACILITIES	UNIUYO	UNICAL	NAUA	MOUAU
CD-ROM	NU	NU	NU	NU
Interactive White Board	NU	NU	NU	NU
Online LCSH	NU	NU	NU	NU
Online LC Schedules	NU	NU	NU	NU
Online AACR2	NU	NU	NU	NU
DDC Online	NU	NU	NU	NU
Projectors	NU	NU	NU	NU
Internet Facilities	NU	NU	NU	NU
Computers	NU	NU	NU	NU

Used (U - 5),Not Used (NU - 1)

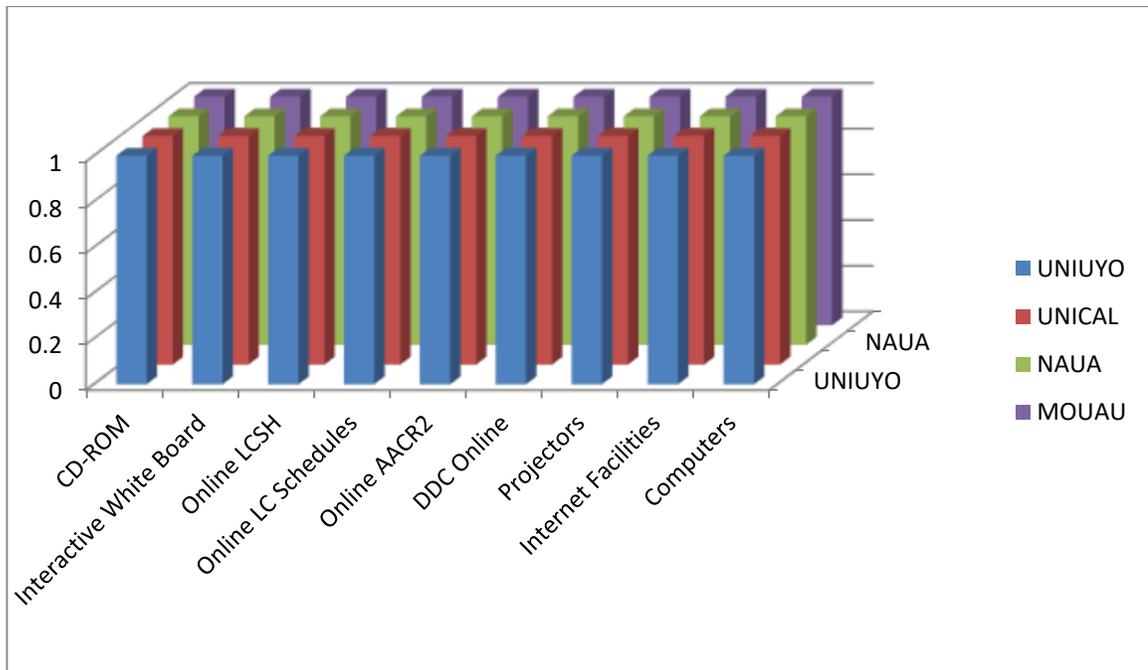


Table 2 shows that none of the ICT facilities listed are used for the teaching of information organization in the library schools in the Universities of Uyo, Calabar, Michael Okpara University of Agriculture Umudike and Nnamdi Azikiwe University, Awka.

Research Question 3: To what extent are the tools used in the teaching of Information Organization courses in the library schools.

Table 3: Extent of ICT facilities used in the teaching of Information Organization.

ICT FACILITIES	UNIUYO	UNICAL	NAUA	MOUAU
CD-ROM	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL
Interactive White Board	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL
Online LCSH	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL
Online LC Schedules	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL
Online AACR2	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL
DDC online	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL
Projectors	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL
Internet	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL
Computers	NOT AT ALL	NOT AT ALL	NOT AT ALL	NOT AT ALL

(High Extent (He - 5) Low Extent (LE - 3) Not at All (NAA - 1

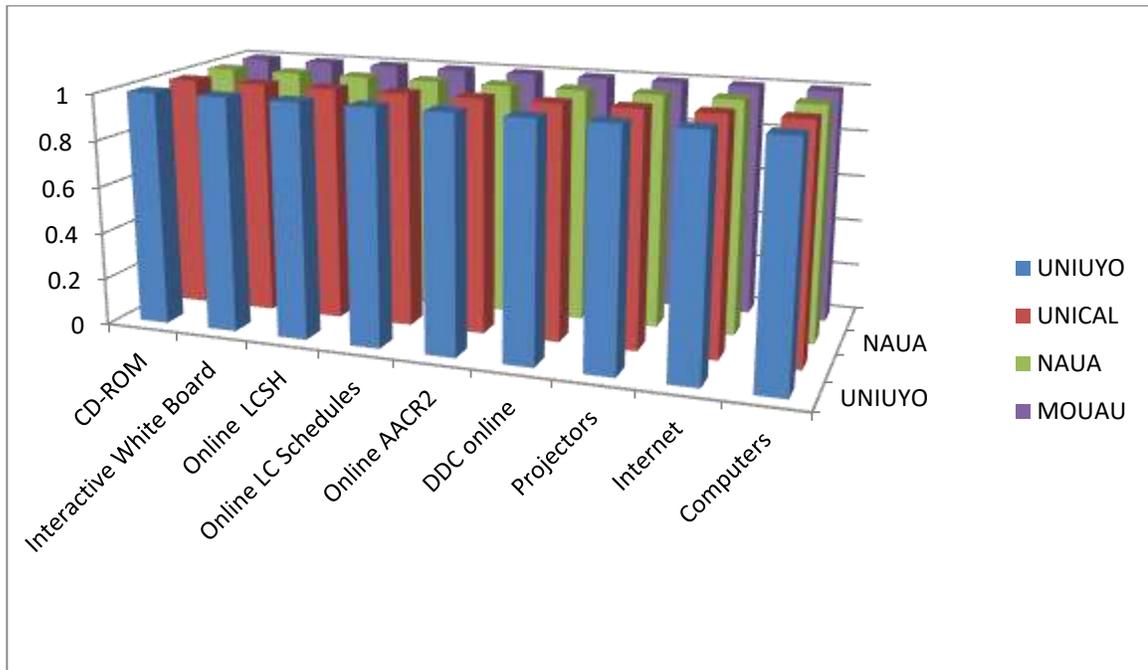
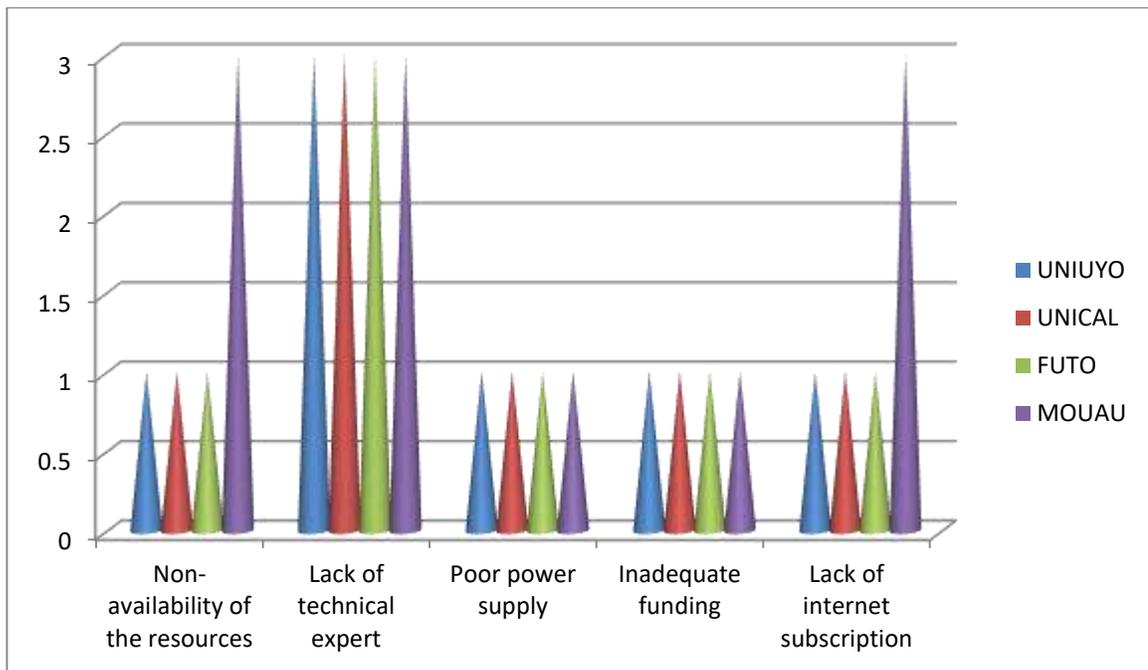


Table 3 shows that all the universities under study indicate non usage of all the ICT facilities for the teaching of information organization in library schools.

Research Question 4: What factors militate against non- usage of ICT facilities in the teaching of information organization

Table 4: Factors militating against non- usage of ICT Facilities in the teaching of Information Organization

S/N	Items	UNIUYO	UNICAL	FUTO	UMUDIKE
1.	Non- availability of the resources	A	A	A	D
2.	Lack of technical expert	D	D	D	D
3.	Poor power supply	A	A	A	A
4.	Inadequate funding	A	A	A	A
5.	Lack of internet subscription	A	A	A	D



Agreed (A – 1) Disagreed (DA -3)

Table 4 shows that Universities of Uyo, Calabar, Nnamdi Azikiwe University, Awka and Federal University of Agriculture, Umudike agreed that one of the factors militating against non-usage of ICT facilities in the teaching of Information Organisation is non-availability of resources, although MOUAU disagreed indicating that the resources are available in that institution. On the aspect of lack of teaching experts, all four institutions disagree to this assertion indicating that all four institutions have the teaching experts. From the responses, poor power supply and lack of internet subscription are other factors that militate against the teaching of Information Organisation in library schools. However, MOUAU disagreed with this assertion showing that there is internet subscription in that institution. One other major factor according to the four institutions is inadequate funding which has affected the use of ICT facilities in the teaching of Information Organization in the library schools.

DISCUSSION OF FINDINGS

Number of Information Organization Courses taught and hours allocated to the course in library schools

Information Organization according to Ochalla et al (2015) faces many challenges which include the hands on application of those principles that professionals often believe to be essential. This is related to the fact that there may not be ICT facilities and web resources in the schools for the students to use. There is no consistency in the number of credits hours

allocated to the teaching of Information organization in Nigerian library schools as indicated in Table 1. This is in line with Hill (2004) observation that most library schools offer at most two cataloguing courses and the first is increasingly not a cataloging course per se, but instead a kind of cataloging appreciation course, sporting a name like introduction to the organization of knowledge. Bothmann (as cited in Yacoob and Bowen-Chang, 2011) also observed that the academic programmes do not adequately prepare cataloguers to enter the world of work due to the hours these courses are taught.

Facilities used in the teaching of Information Organization in library schools

From the result on Table 2, it is deduced that in this information age, the core course which is information organization is still being taught manually in Nigerian library schools. Adeleke and Olorunsola (2010) assert that for libraries to function effectively in the present age, the manual processes or methods will have to give way to information and communication technologies (ICT) and a computer driven environment. This implies that the teaching of this important course should no more be done manually in Nigerian library schools. This will help publicise the holdings of these institutions with other libraries within and outside the country.

Extent ICT Facilities used in the teaching of Information Organization

The ICT tools that are supposed to be used in the teaching of information organization in the library schools unfortunately are not used for the purpose they were meant for. None availability of web resources also affect the teaching of information organization in Nigerian library schools. This is at variance with Brenda, Salem, Carlos & Peña (2013) who expresses the experience of how cataloguers are taught RDA with the use of information technology.

Challenges of using ICT facilities in the teaching of Information Organization

Funding is an important factor in the teaching and management of library schools and has been identified as the major constraint in the teaching of information organization in Nigerian library schools in addition to lack of Internet subscription and poor power supply. No library or organisation can survive and compete favourably without proper funding. This assertion corroborates with Nkanu and Okoro (as cited in Okiy, 2014) findings that inadequate provision of funds and poor electricity supplies among others are the challenges affecting the application of ICTs. To sum up the assertion, Adeleke (2010) noted that most librarians do not know how the tools are accessed due to haphazard training in the library schools.

CONCLUSION

Information Organization has been identified as the soul of librarianship. This is because nobody graduates from Library school without being taught the course. As important as it is, the study has revealed that even in the information age, the ICT resources that are necessary for the teaching of the course are not available in the schools and therefore are not utilized in the teaching process which affect the era of change as this militate against proper change from analogue to digital.

Recommendations

1. More credit hours should be allocated to information organisation so that more hours could be added for hands on as this is the core of librarianship.
2. All ICT facilities needed for the teaching of Information Organisation should be made available if we have to compete with other library schools.
3. As a matter of urgency, the online schedules should be integrated into the teaching of Information Organization so as to be ICT complaint.
4. The universities management and friends of the library schools should find the schools so that the necessary online schedules could be acquired and subscribed for the teaching of Information Organisation.

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