

Perceived Obstacles to The Utilization of Web 2.0 Technologies in The Delivery of Business Education Course Content in Southern Nigeria

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Abstract

The study was conducted to determine the perceived obstacles to the utilization of Web 2.0 technologies in the delivery of business education course content in southern Nigeria. A descriptive survey design was used in the study. The population of the study comprised one hundred and twenty-five (125) business education lecturers (69 male and 56 female) in seven (7) universities in southern Nigeria. The entire population was used because it was manageable; thus, there was no sample in the study. Questionnaire titled “Perceived Obstacle for the Utilization of Web 2.0 Technologies” (POUWTQ) was used as an instrument for data collection. The instrument was validated by two experts and tested for reliability using split-half analysis, which produced a reliability coefficient of 0.79. The mean and standard deviation were used to answer the research questions, while an independent t-test was used to test the null hypotheses. Findings revealed that the perceived obstacles influence the utilization of Web 2.0 in delivering business education course content, and the result of the hypothesis revealed that this indicates that there is no significant difference in the mean scores of male and female business educators on the perceived obstacles for the utilization of Web 2.0 technologies in the delivery of business education course content in southern Nigeria. It was recommended that the university management train and retrain business education lecturers on the usage of Web 2.0 in the delivery of business education course content.

Key words: *Obstacle, utilization, Web 2.0 technologies, delivery, Business Education Course Content*

Introduction

The introduction of technology has made it possible to access a wider variety of materials and information over the web, leading to a rise in its usage. Many digital technologies have been invented to facilitate human connection and communication since the introduction of technology. Since the advent of Web 2.0 technology, people have had easy access to the internet and can communicate with ease on a global scale. Web 2.0 technologies are gaining significant traction in educational settings, while more research is needed to fully understand their efficacy in these settings. Agim, Ochui, & Atah, (2020) asserted that, for both teachers and students, the abundance of didactic tools presents innovative and exciting opportunities and there is a good chance that it will have a major impact on the process of teaching and learning languages, given its impressive effects in educational institutions and its encouraging outcomes. In consonance with the opinion of Bessong, Nwosu, & Atah, (2022) Web 2.0 services and technologies have a significant impact on educational sector.

Akeke, Atah, Undie, Ajuluchukwu, Ikpi, Kolo, Eleng, & Ben, (2023) revealed that, education providers now have more possibilities for learning thanks to Web 2.0 technology and services. Wiki technology, for instance, allows users-such as students-to collaboratively produce, modify, link, and share web information. This promotes collaborative learning. With the use of blog (web log) technology, users can engage in active, reflective learning by routinely posting personal content online and inviting others to remark to further discuss and exchange experiences. Instead of just consuming pre-existing knowledge, people can now readily contribute to the development of new knowledge using wikis, blogs, and other Web 2.0 tools. Teachers now have more possibilities for assessment thanks to these technologies. The end effect is frequently a teaching and learning environment that is more dynamic and cooperative (Atah, Idike, and Nyiam, 2022).

A more open approach to learning is fostered by Web 2.0 tools and services. Easy access to a vast range of learning resources and the capacity to fulfill predetermined goals for both educators and students are made possible by the freedom to share, develop derivative works, republish, and redistribute these works. Nwosu, Bessong, & Atah, (2022), agreed that the affordances of social networking, where students create identities and cultivate diverse relationships, can be accessed by users through Web 2.0 technologies and services, leading to a more community-focused approach to inquiry and practice. Atah, Idike, Godwin, Isaac, Ititim, Okpe, & Ochui, (2023) asserted that, web 2.0 collaborative websites have the potential to link educators, parents, students, teachers, and administrators. Web 2.0, according to Akeke, Ushie, & Atah, (2019), is a social usage of the internet that enables people to work together, actively participate in content creation, produce knowledge, and exchange information. Web 2.0 marked a shift in the nature of the World Wide Web, transforming it from a one-way dialogue between web producers and users to an interactive experience. It also indicates a more populist readiness to participate, irrespective of their level of technical expertise. The internet is now more than just a resource search engine and information provider. In light of Yuen, Yaoyuneyong and Yuen (2011) said that the internet has become a worldwide network of interconnected learning communities with the introduction of web 2.0. User-generated, online material became more widely available while the prevalence of these tools increased.

According to Atah, Ukah, & Crossdale, (2019) predictions, the development of Web 2.0 will change how colleges and universities conduct their operations related to education. Web 2.0 technologies can improve and connect school communities to increase engagement, assist alumni stay in touch, and increase education's capacity to coexist symbiotically with industry, in addition to supporting learning, teaching, and evaluation. According to Zelick

(2013), the claim has led some educators to investigate how social networking might enhance "conventional" interactions and conversations between students and instructors. According to Fagbola (2017), 21st-century university teaching and learning procedures are undergoing a fresh revolution because to web 2.0 tools. Considering this, he argued that revolutionizing teaching and learning greatly depends on the awareness and utilization of the lecturers working in these universities. He carried out a survey to find out how much lecturers in Nigerian universities knew about and used web 2.0 tools. The study's conclusions showed that instructors in Nigerian universities had a high degree of web 2.0 tool awareness and usage. According to Agim. Atah, & Ochui, (2022), the most widely used teaching technologies among lecturers were found to be wikis, podcasts, Facebook, YouTube, LinkedIn, Twitter, and wikis. However, the most popular web 2.0 tools among lecturers were found to be Facebook, LinkedIn, and wikis. Additionally, lecturers were found to use tools specifically for the purposes of relating to, communicating with, and collaborating with colleagues, as well as sharing educational materials for the purpose of teaching and learning. The results also revealed a noteworthy distinction in the degree of awareness and utilization of Web 2.0 tools between the instructors who were male and female. Ertmer, Joshua, and Nwabufo (2014) pointed out that several obstacles prevent instructors from using Web 2.0 technologies in the classroom. These include factors that limit or prohibit teachers from using technology in the classroom, as well as apathy.

According to George (2000), the main obstacles to integrating Web 2.0 technologies into classrooms include pedagogical applications, budget, time for planning, teacher expertise, and technical support. According to Regolith (2011), the main obstacles to developing classrooms with enhanced technology where these applications will be used effectively are a shortage of technology, time, and assessment. Once more, the condition of educational agencies as well as a lack of funds and resources were mentioned by Whitehead, Jensen, and Boschee (2013) as significant obstacles to incorporating new technologies into teaching and learning. A lack of professional development and training, the high cost of developing programs, the government's lack of motivation for lecturers, inadequate access to technology, inadequate infrastructure, poor internet access, inadequate funding, and lecturers' lack of personal interest could be additional obstacles to the integration of Web 2.0 technologies into Nigerian universities.

Ukah, & Atah, (2022) asserted that, despite certain obstacles, Web 2.0 technologies have a lot to offer the academic community and lecturers who use them to conduct teaching. Therefore, it is necessary to support business education lecturers in their use of these applications for research, teaching, evaluation, supervision, monitoring, and other purposes. The challenges of integrating these technologies into business education instructional delivery can be met in several ways, including the availability of web 2.0 technologies, ongoing training and retraining for business education lecturers, raising awareness of the technologies' significance for both lecturers and students, automation, and a steady supply of power to the business education computer lab. Based on this note, the researchers carried out a study on perceived obstacles to the utilization of Web 2.0 technologies in the delivery of business education course content in Southern Nigeria.

Purpose of the Study

The main purpose of this study was to assess the perceived obstacles to the utilization of Web 2.0 technologies in the delivery of business education course content in southern Nigeria. Specifically, the study sought to:

1. Examine the challenges facing business education lecturers in the utilization of Web 2.0 technologies in the delivery of business education course content in southern Nigeria.

Research Questions

The following research questions have been formulated to guide this research work:

1. What are the perceived obstacles to the utilization of Web 2.0 technologies in the delivery of business education course content in southern Nigeria?

Research Hypotheses

The following null hypothesis will be tested at the 0.05 level of significance.

1. There is no significant difference in the mean ratings of male and female business education lecturers on the perceived obstacle to the utilization of Web 2.0 technologies in the delivery of business education course content in southern Nigeria.

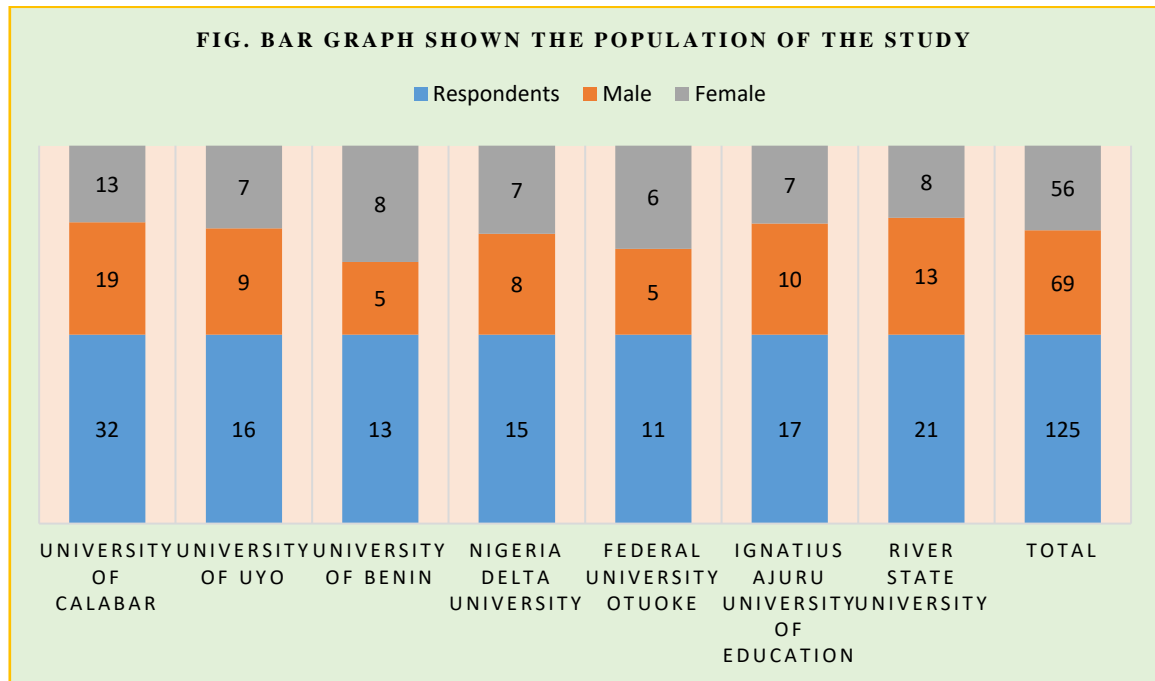
Research methodology

The research design that was adopted for this study is descriptive survey research. The area of this study is Southeast Nigeria. Population of this study consists specifically of all business education lecturers in both federal and state universities in the South-South geopolitical zone of Nigeria that are running the business education programme. One hundred and twenty-five business education lecturers were used in the study. The instrument for data collection in this study was questionnaire. The questionnaire is titled "Perceived Obstacle for the Utilization of Web 2.0 technologies" (POUWTQ). The instrument is divided into sections-A and B. Section A sought information on the respondents' school, gender. Section B has item 1-9 which was answer question one. The items were scored on four points rating scale of strongly agreed (4), Agreed (3), disagreed (2) and Strongly Disagreed (1). Two experts from Business education Unit of University of Calabar validated the instrument. The instrument was subjected to reliability test after validation. A trial test was carried out in Ebonyi State University which does not fall within the study area. The instrument was administered on 22 lecturers and data collected were analysed using Crombach Alpha reliability coefficient. The reliability indexes obtained was 0.79. The questionnaire for the study was distributed to the respondents by researchers. The respondents were requested to fill the questionnaire and return them immediately. This method was adopted to ensure a very high return of the questionnaire. The statistical tools that were used to analyses the data collected were mean, standard deviation and independent t-test. Mean and standard deviation of scores was used to answer the research questions. The item by term analysis was subject to the decision bunch mark as shown in Table 1.

Table 1

Response options	Point	Decision Bunch Mark
Strongly Agreed	4	3.50-4.49
Agreed	3	2.50-3.49
Disagreed	2	1.50-2.49
Strongly Disagreed	1	1.00-1.49

The hypotheses were tested at 0.05 level of significance using the t-test statistics. The null hypotheses were accepted when t-calculated value is less than the t-critical value and or rejected when the t-calculated value is equal or greater than the t-critical value. Figure 1. Bar graph showing the population of the study.



Findings of the Study

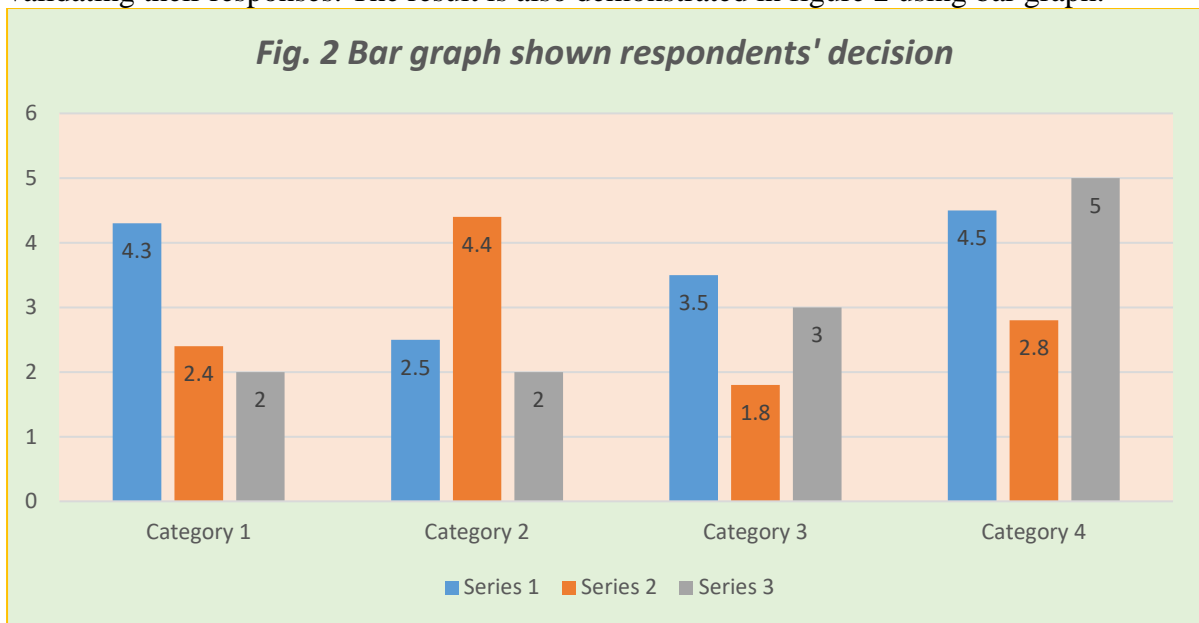
Research Question

What are the perceived obstacles for the utilization of Web 2.0 technologies in delivery of Business Education Course Content in Southern Nigeria?

Table 2: Mean rating of perceived obstacles for the utilization of web 2.0 technologies in delivery of Business Education Course Content

S/N o	Items statement on obstacles for the utilization of web 2.0 technologies	N	Minimum	Maximum	Mean	SD	Remarks
1	Ignorance of the use of Web 2.0 tools	32	1.00	4.00	2.8125	1.14828	Agreed
2	Employers' lack of motivation on the usage of web 2.0	32	1.00	4.00	3.1875	1.02980	Agreed
3	Personality, credibility, and issues of confidentiality among lecturers	32	1.00	4.00	2.8750	1.21150	Agreed
4	Absence of ICT infrastructure	32	2.00	4.00	3.5000	.71842	Agreed
5	Absence IT tool maintenance culture	32	1.00	4.00	3.1563	.95409	Agreed
6	Inadequate internet access	32	1.00	4.00	3.3125	.93109	Agreed
7	Limitations of lecturers' ICT expertise	32	1.00	4.00	2.8125	1.14828	Agreed
8	Absence of Management support programmes	32	1.00	4.00	3.1875	1.02980	Agreed
9	High development costs for programs	32	1.00	4.00	2.8750	1.21150	Agreed
	Grand Mean	32	1.00	4.00	3.0798	1.04253	Agreed

Data presented on Table 2 revealed that all items had mean value ranging from 2.8125 to 3.5000, the mean value for item 5 was above 3.49; indicating that the respondents strongly agree that the perceived obstacles influence the utilization of Web 2.0 in delivering business education course content. While items 1, 2,3,5,6,7,8 and 9 agree to the obstacles of web 2.0 utilization. This indicating that the respondents strongly agreed with the items listed as an obstacle to the used of web 2.0. The standard deviation of the items ranged from 0.93109-1.148125 showing that their response is not far from each other in their response, therefore validating their responses. The result is also demonstrated in figure 2 using bar graph.



Research Hypothesis

There is no significant difference in the mean ratings of male and female business education lecturers on the perceived obstacle for the utilization of Web 2.0 technologies in delivery of Business Education Course Content in southern Nigeria.

Table 3: Mean rating of responses on male and female business education lecturers on the perceived obstacle for the utilization of web 2.0 technologies

Category of respondents	N	Mean	Std. Deviation	Std. Error Mean	df	t-cal	Alpha	Critical-t	Decision
MALE	18	2.8889	1.18266	.27876	30	.421	0.05	.423	NS
FEMALE	14	2.7143	1.13873	.30434					
MALE	18	3.1111	1.18266	.27876	30	-.470	0.05	.146	NS
FEMALE	14	3.2857	.82542	.22060					
MALE	18	3.1667	1.20049	.28296	30	1.581	0.05	.926	S
FEMALE	14	2.5000	1.16024	.31009					
MALE	18	3.6111	.60768	.14323	30	.992	0.05	.069	NS
FEMALE	14	3.3571	.84190	.22501					
MALE	18	3.2222	1.06027	.24991	30	.438	0.05	.072	NS
FEMALE	14	3.0714	.82874	.22149					
MALE	18	3.5000	.78591	.18524	30	1.306	0.05	.068	NS
FEMALE	14	3.0714	1.07161	.28640					
MALE	18	2.8889	1.18266	.27876	30	.421	0.05	.423	NS
FEMALE	14	2.7143	1.13873	.30434					
MALE	18	3.1111	1.18266	.27876	30	-.470	0.05	.146	NS
FEMALE	14	3.2857	.82542	.22060					
MALE	18	3.1667	1.20049	.28296	30	1.581	0.05	.926	S
FEMALE	14	2.5000	1.16024	.31009					
MALE	18	28.666	9.5854	2.2593	30	0.644	0.05	0.355	NS
FEMALE	14	26.500	8.991	2.4029					

Table 3 revealed that the calculated t-cal 0.644 was greater than the critical-t 0.355 Null hypothesis one was retained. This indicate that there is no significant difference in the mean scores of male and female Business Educators on the perceived obstacle for the utilization of Web 2.0 technologies in delivery of Business Education Course Content in southern Nigeria. The finding is also demonstrated in figure 2 using radar graph.

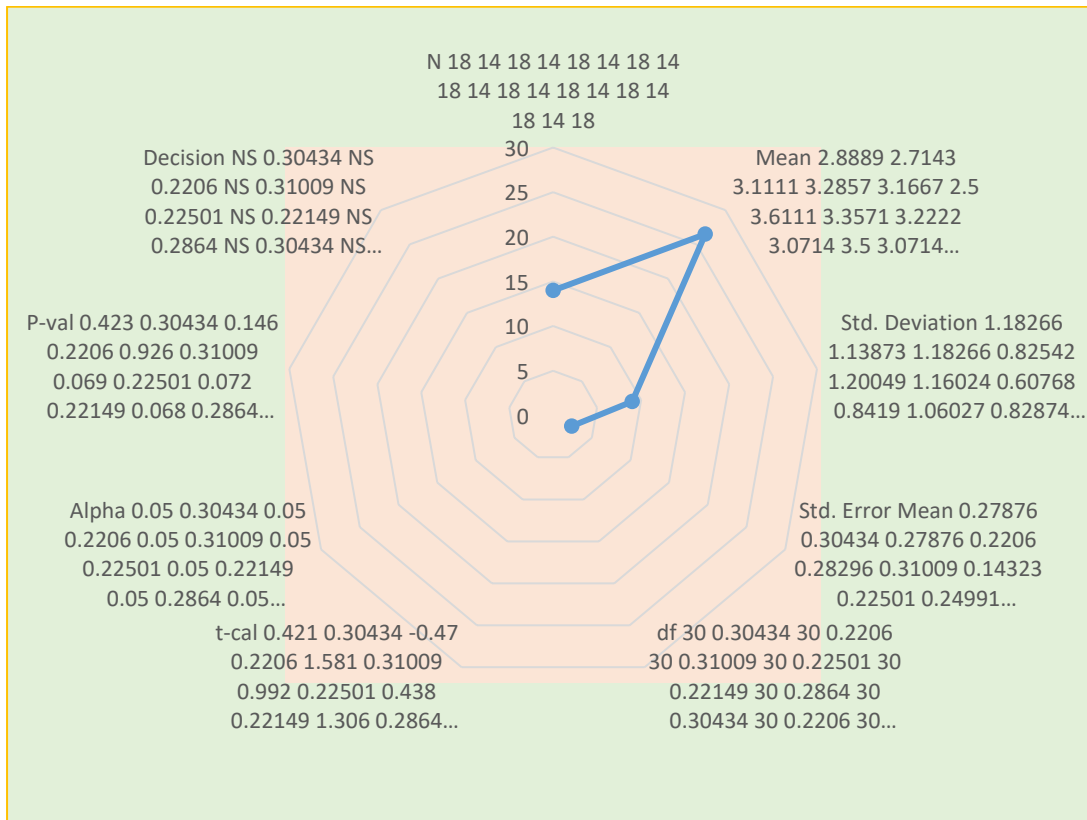


Figure 2: Radar graph showing the respondents' decision.

Discussion of the findings

The study's conclusions demonstrate that different kinds of perceived barriers hinder the use of Web 2.0 technologies in Southern Nigeria for the delivery of business education course content. This suggests that while the mean value of all the items in Table 2's data ranged from 2.8125 to 3.5000, the mean value of item 5 was higher than 3.49, suggesting that respondents firmly believe that perceived barriers affect how Web 2.0 is used to deliver course content for business education. Items 1, 2, 3, 5, 6, 7, 8, and 9 concur with the challenges associated with utilizing web 2.0. This indicates the respondents' belief that the items listed as perceived barriers to Web 2.0 use have a major impact on how Web 2.0 is used in business education in southern Nigeria to provide course content.

The results are consistent with those of Ertmer, Joshua, and Nwabufo (2014), who suggested that a few obstacles prevent instructors from utilizing web 2.0 technologies as teaching tools. These obstacles include dynamics that limit or prohibit teachers from utilizing the technologies in the classroom, as well as a lack of enthusiasm among university lecturers and students for integrating web 2.0 into the delivery of business education course content. Another study by George (2000) found that the main obstacles to the adoption of web 2.0 technologies in the classroom are technical assistance, teacher expertise, time for planning, budget, and pedagogical applications. According to Regolith (2011), the main obstacles to establishing technology-enhanced classrooms where these applications will be implemented effectively are a lack of time, assessment, and technology. Once more, funding, resources, and the condition of educational agencies were cited by Whitehead, Jensen, and Boschee (2013) as the main obstacles to using digital technologies into teaching and learning.

According to the hypothesis's findings, there is no discernible difference between the mean evaluations of male and female business education lecturers about the perceived barriers

to using Web 2.0 technology to deliver course content in business education in southern Nigeria. Table 3 illustrates this conclusion, showing that the computed t-cal 0.644 was higher than the crucial t-0.355, which maintained the null hypothesis. This suggests that views on the perceived barrier to the use of Web 2.0 technologies in the delivery of Business Education course content in southern Nigeria were held differently by male and female business education instructors. This implies both the male and female business education lecturers could suffered the consequences of the perceived influence of web 2.0 utilization in delivery business education course content southern Nigeria.

Conclusion

The perceived obstacle addressed in this study were Lack of awareness of web 2.0 tool in teaching, lack of lecturers' motivation, problem of identity, trust and privacy, lack of infrastructure, lack of maintenance culture, poor internet system, lecturer limitation in ICT skills, Lack of administrative support programme and high cost of programme development in the universities. The perceived obstacles are not gender sensitive; this implies gender did not differ in their decision. Thus, attention should be given to the perceived obstacle in the 21st Century university sitting to enhance the preparation of Business Education students to be global competitive and able to contribute to global economy sustainability.

Recommendations

Based on the findings of the study, it was recommended that:

1. The Universities Management should train and retrain business education lecturers on the usage of web 2.0 in delivering of business education course content.
2. The universities management should provide web 2.0 facilities to enhance the business education lecturers in delivery course content.

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