Improving the Web Presence and Visibility of Delta State Polytechnics, Ogwashi-Uku, Ozoro, and Oghara.

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Introduction

Information and communication technology (ICT) has rejigged the conventional methods of educational delivery. With the aid of technological devices, lecturers are able to access materials for preparing their lesson notes. Because massive amounts of information (books, audio, images, videos) are available at one's fingertips through the Internet, and opportunities for formal learning are available on the world wide web or simply the web. The web also facilitates the preparation of lesson notes and allows teachers to plan interactive, multimedia-rich lessons and create assessments and assignments that can be delivered across a range of technologies for use in and out of the classroom. Furthermore, it provides teacher's with the means to use real-time feedback, which allows them to determine how well a class understood a lesson and even drill down to individual student's comprehension. The web has bridged geographical gaps and provided all and sundry with new forms of collaborative interaction.

The concept of web presence and visibility

Web presence, is the total footprint of a person or organization on the Internet. Meaning, it is the collection of websites, social media profiles, back links, and search engine ranking. It also refers to how a person or institution appear online or on the web. It implies what people find when they search for a person or an institution on the internet. A person's web presence includes content that he/she controls, like his website and social media profiles, among other things such as online reviews. His web presence includes every information that can be found on the web about him from your website, all social media sites (LinkedIn, Facebook, Twitter, etc.), Office/ locations (Google Maps, etc.), directory listings, online reviews (Google, Yelp, etc.).

It can be seen as a location on the World Wide Web where a person, business, or some other entity is represented. Examples of a web presence for a person could be a personal website, a blog, a profile page, a wiki page, or a social media point of presence (e.g. a LinkedIn profile, a Facebook account, or a Twitter account). Examples of a web presence for a business or some other entity could be a corporate website, a microsite, a page on a review site, a wiki page, or a social media point of presence (e.g., a LinkedIn company page and/or group, a Facebook business/brand/product page, or a Twitter account). Every institution in this digital age, requires

a strong web presence because information seekers are turning to the internet to find solutions to their information needs. When people search for an institution or a person online, they will want to know who you are, what you do, where you are, when you are doing what, and how they can be involved. Therefore, a good website is supposed to answer these questions.

On the other hand, the attention you attract in your website is a function of your web visibility. It refers to how you position or structure or design your website in such a way that when people are searching the internet, they will be attracted to your website. That is the concern of web visibility. It refers to the process of getting your website found on the internet when your prospects are searching for something on the internet. One of the best ways to increase your visibility is to get your site ranked in the main search engines of Google, Yahoo, and Bing (Anyira, 2014). There are hundreds of search engines, but these three accounts for nearly 80 % of all search engine traffic. This paper specifically focuses on how Delta State Polytechnic Ogwashi-Uku, Ozoro and Oghara can improve their web presence and visibility so as to maximize the potentials of innovative technologies for education delivery.

Objectives

The specific objectives of this paper are:

1. To highlight how institutional web presence and visibility are measured.
2. To examine the web presence and visibility of the three polytechnics.
3. To identify the causes of poor web presence and visibility.
4. To identify ways of improving web presence and visibility in the polytechnics.
5. To recommend what needs to be done to improve the web presence and visibility of the three polytechnics.

MEASUREMENT OF WEB PRESENCE AND VISIBILITY

According to Aguillo, Ortega & Fernández (2008), web presence and visibility are measured using four basic (objective) parameters namely:

1. Number of pages linking to the institution's web pages representing <u>visibility</u>:
2. Number of web pages on the institutions web site representing <u>size</u> of the institution's web.
3. Number of <u>published rich files</u> in Adobe Acrobat, Adobe Postscript, Microsoft Word and Microsoft PowerPoint formats representing the number of educational materials that the institution publishes.
4. Number of <u>scientific papers</u> indexed by Google Scholar representing the institution's scientific production/publications.

These parameters are explained below:

Visibility

Visibility considers two parameters namely: number of external links and number of referring domain. This indicator contributes 30% to global ranking features. Referring domains: This is also known as ref. domain; they are pages on different websites that point to resources in the institution's domain. It is a main domain for links that redirect visitors to the institution website. (Ortega & Aguillo, 2009). One referring domain can have more than one link to different pages in an institution's website. During measurement of web presence, the number of Backlinks also known as incoming links, inbound links, inward links and inlinks i.e. links received by a web page from another web page is very crucial for evaluating visibility. The number of backlinks is one indicator of the popularity or importance of a website as it is a major factor in ranking. Emphatically, the quality of the contents is evaluated through a "virtual referendum", counting all the external inlinks that the institution's web domain receives from third parties. Those links are recognizing the institutional prestige, the academic performance, the value of the information, and the usefulness of the services as introduced in the webpages according to the criteria of millions of web editors from all over the world. The link visibility data is collected from the two most important providers of this information: [Majestic SEO](#) and [ahrefs](#).
Furthermore, the total number of webpages hosted in the main web domain (including all the subdomains and directories) of the institution is indexed by the largest commercial search engine

([Google](#)). It counts every webpage, including all the formats recognized individually by Google, both static and dynamic pages and other rich files. It is not possible to have a strong presence without the contribution of everybody in the institution as the top contenders are already able to publish millions of webpages.

Size

This is regarded as the volume of information published. It comprises of two parameters with a total weight of 50% apportioned to it out of the percentage of the measurement features (Aguillo, 2014). The parameters involved are:

i.   Number of pages: This entails the number of web pages on an institution's website. These pages may include primary pages which are pages on the website that can be accessed directly with menu or link on the site, and secondary pages; which are pages that are accessible or reached from primary pages. This constitutes 25% of the measurement features.

ii.   Number of rich files: Rich files describe the forms in which scholarly literatures exist, which includes PDFs, power points (PPT), word documents (DOC), and web documents (HTML). These rich files depict how vast a particular file can target audience or the level of content rendering preferences it possesses. Number of rich files contributes 25% to the measurement features.

The Number of Published Rich Files

These are publications on the institution's website that appear in rich formats such as Microsoft word, PowerPoint presentations; portable data file (PDF), etc.

Number of Scientific papers and research impact

This refers to the quantity of published papers in high impact factor journals indexed by Google Scholar representing the institution's scientific production. The research impact measures the international collaboration, scientific talent pool, excellence with leadership, specialization and normalized impact of each institution.

In addition to the aforementioned parameters which are the objective indicators, the subjective indicators are also taken into consideration in measuring web presence. Subjective parameters measure an institution's social contributions to the society, especially to their closest communities. It depicts the level of academia and social services influence on the people in and out of their community. The service includes social media presence, beneficiary programs to government, and education impact programs on the society (Anyira & Idubor, 2019). The subjective feature, contributes 15% to the entire measurement features.

EXAMINING THE WEB PRESENCE AND VISIBILITY OF THE THREE POLYTECHNICS

The three major Search Engine Optimization websites are google.com, bing.com, and yahoo.com. These three would be used to examine the web presence and visibility of the polytechnics.

Table 1: below shows a comparative result of the Google.com search conducted to ascertain the web presence and visibility of the three polytechnics in Delta State:

S/No	Institution	Google Search Result
1	Delta State Polytechnic Ogwashi-Uku	66,600
2	Delta State Polytechnic Ozoro	114,000
3	Delta State Polytechnic Oghara	78,700

From table 1 above, the result shows that Ozoro Poly when searched with Google, has the highest web presence and visibility with 114,000 results, followed by Oghara Poly with 78,700, and Ogwashi-Uku Poly with 66,600.

Table 2: below shows a comparative result of the Bing.com search conducted to ascertain the web presence and visibility of the three polytechnics in Delta State:

S/No	Institution	Bing Search Result
1	Delta State Polytechnic Ogwashi-Uku	58,800
2	Delta State Polytechnic Ozoro	98,800
3	Delta State Polytechnic Oghara	90,900

From table 2 above, the result shows that Ozoro Poly when searched with Bing, has the highest web presence and visibility with 98,800 results, followed by Oghara Poly with 90,900, then Ogwashi-Uku Poly with 58,800.

Table 3: below shows a comparative result of the Yahoo.com search conducted to ascertain the web presence and visibility of the three polytechnics in Delta State:

S/No	Institution	Yahoo Search Result
1	Delta State Polytechnic Ogwashi-Uku	87,000
2	Delta State Polytechnic Ozoro	87,200
3	Delta State Polytechnic Oghara	110,000

From table 3 above, the result shows that Oghara Poly when searched with Yahoo, has the highest web presence and visibility with 110,000 results, followed by Ozoro Poly with 87,200 then Ogwashi-Uku Poly with 87,000.

Table 4: below shows a comparative result of the scholar.google.com search conducted to ascertain the scholarly/research performance on the web of the three polytechnics in Delta State:

S/No	Institution	Google scholar Search Result
1	Delta State Polytechnic Ogwashi-Uku	318
2	Delta State Polytechnic Ozoro	508
3	Delta State Polytechnic Oghara	300

From table 4 above, the result shows that Ozoro Poly when searched with Google Scholar has the highest web presence and visibility with 508 results, followed by Ogwashi-Uku Poly with 318 results, then Oghara Poly with 300 results.

CAUSES OF POOR WEB PRESENCE AND VISIBILITY

Poor web visibility and web presence are largely caused by certain Institutional and individual factors that are left unattended to. These factors tend to build up overtime until they become almost unbearable. At the institutional level, many African Institutions have not put in place necessary infrastructure to encourage robust web practices. Sometimes this is due to poor funding by government or individual proprietors or a lack of will-power on the part of management of those Institutions to put up enabling environment for web activities to thrive. Sometimes the reason for it is due to bad web practices. According to Aguillo (2014) there are examples of institutions that change their web domains, and also maintain the older ones or even organizations with two or more web domains. These practices not only penalize their web ranking but most importantly decreases the visibility of their contents in the search engines. Many institutions in Nigeria do not have existing web policy and where they exist; little is done to enforce them.

Furthermore, the Nigerian Universities Commission (2006) pin-pointed the following as factors responsible for Nigerian institutions' poor web visibility and performance in international rankings:

i. Little attention is paid to communicating research findings conducted by scholars in Nigerian institutions in a web-searchable form which manifests in publishing in low impact local journals without Internet links; and non-publishing in electronic journals especially open access journals.

ii. Absence of Nigerian institutions on the Internet in a form that can be picked by the radar of web ranking organizations.

iii. Lack of up-to-date and scanty content of the websites of Nigerian institutions.

CONCLUSSION

The need for improved web presence and visibility in the three polytechnics cannot be underrated. The web apart from giving scholars the opportunity to reach larger audience, institutional performance is measured by the activities of the institution that can be accessed from the web. Thus, what an institution makes available and is accessible on the web is what makes up its web presence. An institution may parade the highest number of quality

academicians coupled with robust infrastructure, publishing regularly and adequately in printed journals, but what the institution has on the web is few, the institution's web presence will be very low. The global community is interested in knowing not only the inventions and achievements an institution is making, but also interested in knowing how it is communicating these achievements to people all over the world. In other words, the World Wide Web has become a major tool being used by scholars for enhancing online visibility and publicity of academic findings. The Web has become also a key medium for promoting and developing the academic, scientific and educational competence of any educational institution. The Web can hence be used as a way to attract students, scholars and funding by spreading the prestige of these educational institutions all over the world.

As a matter of fact, hardly is there any successful research conducted by scholars without turning to the web to find information in present times.

RECOMMENDATIONS

A declaration of state-of-emergency geared towards improving the web presence and visibility of the polytechnics, is a step in the right direction. Organization of a training workshop on the subject matter for all stakeholders is key to its success. Improved web presence and visibility requires a synergy between the institution and staff members. It begins with a positive attitude to embrace change for the provision of a strong ICT infrastructure by management and effective utilization of web services by staff. This can be achieved through the following recommendations:

1. Formulation and implementation of a good web Policy.
2. Increase the activities on the institution's website including the documentation of all staff profiles and issuance of institutional e-mail addresses to all staff.
3. Improve publicity of social and academic activities online.
4. Engage in activities that academically impact the immediate community, the country and the world at large. This will interest and attract people outside the institution thereby increasing the institutions external links (trainings, consultancy, external collaborations etc).
5. Involvement of the entire staff and students in growing content on the institution's domain.

6. Activation of the online staff profiles and advertisement of such profiles on linked In, Facebook and other social media as much as possible.

7. Updating the Website constantly with contributions coming from all Deans, HOD's, Directors and Heads of Units, scholars and consultants.

8. Publishing of Research Activities on the website. Including the introduction of open access journals by departments and or schools to be hosted on the institutions website.

9. Uploading news, stories and notices. Archiving old pages rather than deleting them is encouraged.

10. Using keywords in the content to be uploaded in institution websites, to make it easy for Google to index them and locate them accordingly. For example, including the name of your faculty, department, or unit in the text, instead of just in the heading, and use other keywords or keyword phrases that people would typically search for.

11. Using hyperlinks as an opportunity to emphasize keywords.

12. Having and maintaining ONLY one official website with the name of the institution as the domain name.

13. Uploading documents in Rich Files Formats (those that appear as Word Documents, PowerPoint Presentations, Portable Data Files (PDF) and hypertext Mark-up Language files).

14. Encouraging all academicians to publish a minimum of three articles yearly in highly rated open access journals in their fields. This should have a policy statement backing it up for effective implementation.

15. Registration of all Teaching staff on Google scholar and research gate platforms.

16. Making it compulsory for all staff publications and students projects/thesis/dissertations to be in the institution's open access repository.

17. Encouraging all scholars to place all their publications (pre-prints and post-prints) on the institutions web domains. The cost of scanning and related spending should be the responsibility of the institution.

18. Funding of research activities should be taken very seriously by management of higher institutions.

19. Attaching promotion of staff and other welfare packages to publications in high impact factor open access journals.

20. Uploading every document/information meant for staff or students or the public on the institutions websites. Thus, lecture notes, staff CV's, official bulletins etc. should be made available online.

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