Website Navigation Structure Library State University of Medan and State Islamic University of North Sumatra

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Abstract: This study aims to determine the effectiveness of the navigation structure of the website of the State University of Medan and the website of the Library of the State Islamic University of North Sumatra. The research method used is comparative descriptive. The study population is the website visitors at the State University of Medan Library and State Islamic University of North Sumatra. Sampling using purposive sampling. Data collection is done by using an online questionnaire for 2 weeks from 1st - 14th December 2017. Research indicator used: context, link, customization, content and sitemap. In general, the result of the research shows that the structure of website navigation of the State University of Medan Library has been effective (73.8%) but the website of the Library of the State Islamic University of North Sumatra is still less effective (53.6%).

1   INTRODUCTION

Website is a bridge between institutional and stakeholder. Messages delivered via the web can be well received if communications made via the web are well managed (Shah etc., 2015). By company or education world especially for library of university to exchange information. The exchange of information can occur because of the technology created by researchers in the world. Research in the field of information and communication technology every day, always experienced a significant development. To be able to exchange data or information, then required an application as a liaison to the user (Huang, 2011). The function of the website generally more emphasis on the quality of the content because the purpose of the site is to convey the contents of the information (Jasek, 2004). That service quality is a critical determinant of website success, studies show that consumers frequently view the service quality delivered through websites as unsatisfactory (Connolly, 2008)

In information systems, the superiority of a service is seen as the level and direction of the difference between user perceptions and expectations (Tidwell, 2006). Navigate on a website or app like circling. For example the user is looking for information on the website, when the user opens the menu or links that are on the website then the open does not match the name or icon listed on the website.

So the user cannot find the information he wants. A web user often has to do it to achieve the goal. This is a problem in navigating, i.e. a user does not know where they are, where the next destination and to achieve the purpose of a place, it is because the navigation structure on the website is not uniform. Navigation in the website is very influential to increase the number of website visitors (Nizam, 2012; L. Nkweteyim, 2005; Connolly, 2008).

There are several things that can help users navigate, including signpost and wayfinding. Signpost is something that can help users describe the environment near them. Common signposts include page and window titles, web page logos and other branded devices, label and indicator selection. Wayfinding is what they must do to achieve their goals. Some common traits that help the user with wayfinding are clear tagging, environmental guidance and maps. Website Universitas Negeri Medan Library site (http://perpustakaan.unimed.ac.id/) and website of State Islamic University Library of North Sumatra (digilib.uinsu.ac.id/) (Weideman, 2013; Heo, 2013).

Based on the description of the background that has been submitted, then the formulation of the problem is how the navigation structure on the website of the State University of Medan library and the State Islamic University of North Sumatra whether it is effective or still less effective.

2 LITERATUR REVIEWS

Effectiveness is a measure that states how far the target (quantity, quality and time) has been achieved. Where the greater percentage of targets achieved, the higher the effectiveness. Effectiveness is the utilization of resources, facilities and infrastructure in a certain amount consciously set before to produce a number of goods for services activities it runs.

Navigation structure is the structure or flow of a program which is the design of relationships and chains of work from several different areas and can help organize all elements of website creation that supports visitors to conduct site exploration (Nizam, 2012; Binanto, 2010; Prihatna, 2005).

Navigation structure is the structure or flow of a program which is the design of relationships and chains of work from different areas and can help organize all elements of website creation (Prihatna, 2005). Navigate on a website or app like circling. A web user often has to do it to achieve the goal. This is a matter of navigating, that is, how a user knows where they are, where their next destination is and how to reach a destination from somewhere. The key to effective navigation of website placements on websites, limits on the number of options on the content, use clear icons, easy-to-use links, restrict menus and test on various devices.

Good navigation is as follows:

1. Navigation website that allows users

2. Website navigation should be more prominent than other parts

3. Website navigation should make sense to the user

4. Make sure the menu item is logically placed

5. Website navigation should provide the position of the page being accessed

6. The link design should be distinguished between hover, has been visited and has not been visited

7. Text and links should be clickable

8. Provide help

9. Create a search box (Binanto, 2010; Tjiangdiono, 2016)

This study examines the structure of navigation in the homepage of the website to find out how difficult the information can be accessed through the website. The level of visits on the website has many causes in determining the quality level on the website. The cause is influenced by many factors such as hosting used, technical capabilities of internet service providers, paused time recorded as website visit time. The indicator taken is how to achieve the desired

information in the website through the navigation structure on the website (Nizam, 2012; Joko, 2014).

The benefits of navigation on the website are:
1. Accelerate to Get Sitelink With the navigation menu then the blog / web the faster get sitelink because some of the sitelink comes from the navigation   menu
2. Assessed as a Web / Professional Blog Why is considered as a professional, because we have compiled neatly our article articles and has set the barrier between post 1 and other post and we have set our web to be user friendly because it is easy for visitors to explore our blog and easily upload visitor attraction.
3. Good Value from Google Good value by Google because we have spoiled the visitor and Google knows it. Then from that Google will rate more on the website.

Various kinds of navigation structures:
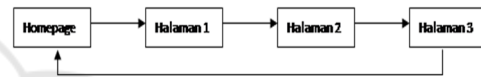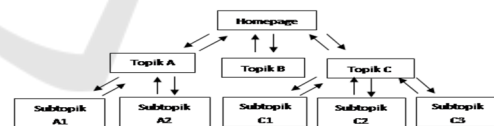1.   Model Linear Navigation.

Figure 1: Model Linear Navigation.

Source: Binanto (2010).

Used by most websites. Information is given sequentially starting from one page. Some web designers use one page to enter or exit from the website.

2.   Hierarchical model.

Source: Binanto (2010).

Figure 2: Hierarchy of Navigation Model.

Adapted from top-down design. This navigation concept starts from one node to the homepage. From the homepage can be made several branches to the main pages. Where necessary, from each main page can be developed into several more branches. It is like the organizational structure within the company.

3.   Spoke-and-hub model

Only use one node to connect with other nodes. In this model there are only two kinds of links, namely from the homepage to a particular page, and from the page back to the homepage.
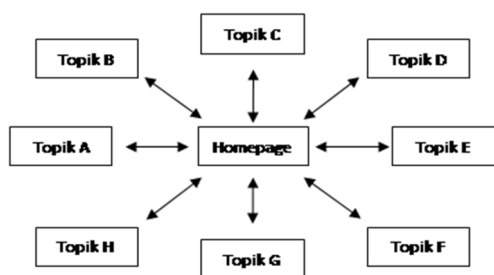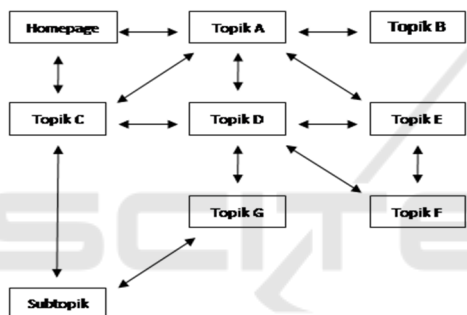
Source: Binanto (2010).

Figure 3: Spoke-and-hub model.

4. Full web model

Provides many hyperlink capabilities. Full web model is widely used because the user can access all topics with subtopics quickly. But the disadvantage of this model, which can result in the user losing way to return to the previous topic.

Source: Binanto (2010).

Figure 4: Full web model

3 METHOD

The method used in this research is descriptive method with content analysis. By content analysis works objectively and systematically to describe the content of materials through quantitative approach. The population of this research is all students of State University of Medan and all students of State Islamic University of North Sumatra. Given the number of population is quite a lot, the authors take a sample using the technique of withdrawal purposive sampling. Spreading and collecting an online questionnaire http://www.perpustakaan.unimed.ac.id and digilib.uinsu.ac.id conducted for 2 weeks (December 01, 2017-14 December 2017) and the sum of samples determined from who opened the website. Data collection techniques used are questionnaires.

Indicators used: context, link, customization, content and sitemap. To interpret the percentage of data tabulated.

The interpretation presented is as follows:

0.00%: no
1-25%: A small portion
26-49%: Almost half
50%: Half
51-75: Mostly
76-99%: Generally
100%: All

Measurements are made using unit of measure, with this respondent asked to fill the check mark on the available answer. Researchers provide 5 alternative answers are:

0-19%: Very Ineffective
20-39%: Not Effective
40-59%: Less Effective
60-79%: Effective
80-100%: Very Effective

4 RESULT

The result of assessment of navigation structure on UNIMED website and UINSU Library website as follows:

Table 1: Website navigation structure.

Indicators	UNIMED (%)	UINSU (%)
Context	77	65
Link	65	38
Customization	77	55
Content	85	55
Sitemap	65	55
Value	369	268
Range	73,8	53,6

4.1 Context

The contexts shown on the UNIMED Library website have been very satisfied with information relating to library services provided to users. It has been concluded that the context on the UNIMED Library website is effective (77%). The context shown on the UINSU library website still has a less displayed context for information services provided to users. His example: in Thesis submission format and thesis, the process does not exist. While the format is very helpful for users to be ready in the submission. In the journal search available in the UINSU library the process cannot be accessed. The context in the UINSU Library is less effective (65%).

4.2 Link

Links contained on the library website have a page that works and works. The available links already have full access to library sites. Links on the UNIMED Library website are effective (65%). The links contained on the library's website contain links that do not have access to different links. Link to UINSU Library is Not Effective (38%).

4.3 Customization

On the UNIMED Library website, its custom templates are very friendly and make visitors more passionate and often visit websites with search engines that culminate the easier it is for users to find information. The UNIMED Library Website also has a custom mobile which can be accessed via other Desktop devices, such as Mobile, Tablet, Smartphone or any other device, but Custom Mobile cannot automatically adjust the size access device screen, for more details below which differentiates between Full Responsive Design and Custom Mobile. On the UINSU Library website, its custom templates are too raw so visitors will feel bored to visit the website. The UINSU library also has a custom mobile that can be accessed via other computers, such as Mobile, Tablet, Smartphone or any other device, but Custom Mobile cannot automatically adjust the size of the screen device access, for more details which follows that distinguish between Full Responsive Design and Custom Mobile. Custom on UINSU Library Effective (77%).

4.4 Content

The content or content of the UNIMED Library website is complete. The existence of the contents of the Library website is the services and information provided by the library. Content in UNIMED Library Very Effective (85%). The content or content of the UINSU Library website is lacking. As for example the contents are still lacking of facilities in the library, online chat directly with the librarian, thesis submission format. Custom on UINSU Library less Effective (55%).

4.5 Sitemap

Broken link pages are modified to show notifications to visitors of their mistakes while providing linked links that will help visitors like F.A.Q or Sitemap or other frequently searched Information. There is date information on all published news, articles and documents. Provide Sitemap that can be easily accessed by visitors. Sitemap on UNIMED Library Effective (65%).
Do not put internal links to public pages like webmail, e-office, internal login, etc. There is date information on all published news, articles and documents. Sitemap on UINSU Library (55%).
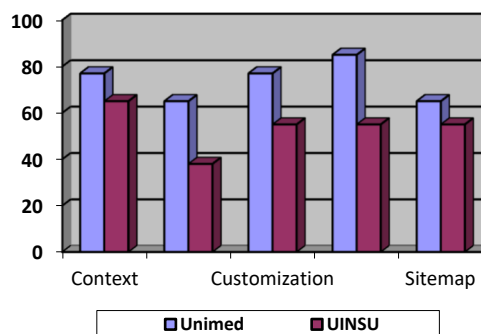

Figure 5: The result of assessment of navigation structure.

5 CONCLUSIONS

There is a significant difference between the two websites. Based on the data obtained, the research results can be concluded that the structure of navigation on the website of the Public University Library of Medan in general has been effective (73.8%) while the website of the Library of State Islamic University of North Sumatra is less effective (53.6%).

There is a shortage on the website of the Library of the State Islamic University of North Sumatra is expected to add more content on the website, such as online-chat directly with the librarian. The benefits to suit the needs of users. It is expected that the custom display on the website of the Library of the State Islamic University of North Sumatra is updated with up-to-date templates, so that library website visitors more enthusiasm to find the required information.

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