Abstrakt w języku angielskim

Design that takes into account the information needs and capabilities of key user groups is a standard in the modern development of digital content, in particular websites and mobile applications. This trend is particularly pronounced in the commercial segment (especially e-commerce), an environment in which process optimizations can be measured (e.g. by comparing sales results).

In line with the commercial environment, the information architecture of the websites of Polish university libraries should be designed to enable them to fulfil the functions expected by society. An initial survey in 2017 revealed that the sites in question are not tailored to the needs of users. This reflection was the starting point for research, the results of which were confirmed by previous observations. The positive result encouraged the author to design a universal model of the information architecture of this type of site. The proposal has been incorporated into the work and thus completes the theory in a practical dimension.

A further argument for research on this topic was the result of a literature review which found that so far only a limited amount of research has been carried out using digital tools such as Google Analytics on the websites of the university libraries.

The study, whose results were presented and discussed in the dissertation, took place from 1 January 2018 to 1 January 2020. The websites of the following institutions were surveyed:

1. Warsaw University Library (BUW),
2. University Library of Wrocław (BUWr),
3. Library of Cardinal Stephen Wyszyński University (BUKSW),
4. Library of the University of Łódź (BUŁ),
5. Library of St. Nicholas Copernicus University in Toruń (BUMK),
6. Library of the University of Opole (BUO),
7. Library of the University of Szczecin (BUS),
8. Library of the University of Warmland-Masuria (BUWM).

These were libraries that had agreed to participate in the studies. This application was sent to all (18) university libraries in Poland, but the eight institutions mentioned have applied.

The subject of the investigation was the behaviour of users of the websites of libraries of Polish universities, as demonstrated by the installation of the Google Analytics tool on them. Digital data was collected, left behind by 2 676 066 users, who had a total of 8 053 094 sessions and 17 085 433 accesses.

The thesis examined many questions related to the defined research topic and finally formulated the following detailed research questions:

1. What are information architecture, user experience, user interface?
2. What functions should the websites of the university libraries have?
3. What is the state of the literature regarding studies on university library websites?
4. On which of the investigated websites of the Polish university libraries do you find information noise?
5. What is the technical status of the pages of the Polish university libraries examined?
6. What resources do users of the websites of Polish university libraries use most often?
7. How many meetings and page views are there on average per user of the websites of Polish university libraries?
8. In what periods will the use of the pages by users of the websites of the Polish University Libraries increase?
9. Which electronic devices do users of the websites of Polish University Libraries use when browsing the pages?
10. In which aspects are the user behaviour of the library pages similar and in which are different?
11. Which main findings from the preceding chapters should be used for the design of the information architecture of the University Library website?
12. What should the website of the University Library look like?

The following research methods and strategies were used to answer the questions asked: bibliographic, growing pearl, literature analysis and criticism, heuristic, deductive, technical, deductive, statistical and comparative methods.

The work describes topics and explains basic terms such as *information architecture*, *user experience* (UX) and *user interface* (UI). The main user groups of the sites studied are also presented and the functions they should fulfil are explained: scientific-pedagogical, informative and sales promotion. It was pointed out that websites do not have to fulfil all the functions assigned to libraries, but rather have to focus on a few selected sites that meet the expectations of the public. It was also pointed out that the role of websites since their inception in the digital space has been evaluated and that their administrators should now adapt their content and design to meet the new needs of readers.

The work analysed and evaluated the technical condition of the sites selected for research, focusing on the quality of their functionality (e.g. the loading time of the site) and their adaptation to use via mobile devices. In addition, a proprietary model was used to measure information noise.

In the main part of the lecture, the results of the measurements carried out with the tool Google Analytics are presented and analyzed. Among other things, answers were sought to the question of how (for what purpose) users use them. Simple quantitative statistics were collected, but also advanced behavioural analyses were carried out (e.g. which parts of the pages are used by users). It was found that 61.46% of visitors had access to catalogues and 16.20% to training materials. 77.66% of all user sessions were calculated to reach scientific and educational content; 17.76% related to library information, 4.58% of which related to other content.

As part of the studies carried out, the priority functions of university library websites and the target groups and needs of university libraries were identified. Based on research results that translate theory into practice, a universal model of the information architecture of the University Library was presented.

The studies carried out and answers to the formulated questions using scientific methods and the realization of the cognitive and practical objectives contribute to the development of the discipline of communication and media studies. These studies have been carried out for the first time and may contribute to a new perspective on the issue of how the library communicates effectively with its users via websites.

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