Construction of Modern University Library Website (CMULW) Based on User Needs

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Abstract. The construction of modern university library website (CMULW) adapts to the changes of the times, and it will extend the scope and content of library services, which is of great significance to the development of universities. This article will be presented to describes the CMULW must follow the user needs from three aspects, including basic function needs, safety and security needs and humanistic respect needs. The website safety and security needs will be used in the website security system to introduce. The CMULW conforms to the requirements of the current era of social information technology development and provides users with better network information services.

1. Introduction
The university library is well stocked, but the collection development of university libraries will be limited by library space. However, the MULW can alleviate the contradiction to some extent. The MULW can integrate library collection resources, set up the digital library, expand the traditional library space, extend the traditional library service mode. It is the basic requirement of MULWC in all-round and high efficiency to meet user needs. Accompanied by the popularization and deepening of computer technology, pace of the information construction has been accelerated, and increased of user aspirations and needs. MULW almost have all the resources and services of the library. MULW is not only the network service platform of the library, it is also the library image on the network. It is the extension and deepening of the development concept of library, including service concept, safety concept and culture concept. \[1,2\] Therefore, the MULW needs not only to enhance its own practicability, and it needs to satisfy the user omni-directional demand to improve the user experience. Only constantly to find and meet the needs of users and improve service capability and the quality of service, is the basic attitude and development path of the modern university library website construction (MULWC).

2. MULWC basic function demand
The basic function demand of MULWC, it means that users can browse the library website and get basic satisfaction. This is also the basic functions that the library website must have. In library website construction, make use of various functional modules of the library website to meet users’ basic needs. It is
the process of library website for enriching the content. To refine the various functional modules of the library website, and make each functional module has the basic information which user needs by browsing.

2.1. **Exhibition function**
This function can fully demonstrate the significance and function of the library, to make users fully understand the library resources and services. In the network environment, due to the rapid growth of information resources, users often cannot rely on their own power to quickly and accurately find the required information from the sea of information. When users browse library website in the first time, the exhibition function can give a general idea of what basic services and resources library can bring. It can guide readers to confirm the correct direction in the sea of information, and search for the information they need timely, accurately and conveniently. Then users can get the basic information needs. Under the condition of understanding the various functions of the library website, when users logging in library website it is necessary to meet the requirements of library resources search, information service, book borrowing and loading, Information space appointment, etc.

2.2. **Resources and Services using function**
This function effectively communicates the library own resources and services to users. Clear target users and improve communication efficiency, so that users can get the resources and services of the library more quickly and accurately. Therefore, the library website needs to provide convenient resources and service utilization function for teaching and research, bring aided teaching to the students, and bring scientific research support to university staffs and researchers. In order to optimize this functionality, there is a higher requirement for the quality, access speed, retrieval speed, retrieval accuracy and update timeliness of library information resources.

2.3. **Extended service function**
This feature extends library services to the library website, it improves the service efficiency of library website and also saves users' time. The user is not required to go to the library, and also can enjoy the services provided by the library when using the library website. Keep the library offline service as much as possible on the library website, and become a combination of offline services and online services. At the same time, enhance the diversity of service terminals, and let this function module can be used more efficiently by users.

2.4. **Resource rendering function**
This function extracts and streamlines the library high-density database resources to the users, and let a large number of databases are presented in an orderly manner on some limited web pages. Good navigation can organize complex page contents, sort out the logic, and establish a concise and easy to understand column information structure. In order to make it is convenient for users to use the library website database resources, the library website will make a bold distinction between Chinese and foreign language databases, and it is usually arranged in order according to the usage rate. In the lookup method of database, user can search by letter A to Z, search by the literature type provided by the database, search by subject area, search by database function, search the database name directly, etc. It is convenient for users to find the target database they want to use, and to better provide professional information resource service.

2.5. **User education function**
This function is designed to enhance the user’s ability when they use the library and library website, to make them can skillfully use the library services and obtain the library resources, and to reflect the library intellectual value. User education, on the one hand, allows users to absorb knowledge about how to use the library, the essence is to take advantage of the stock knowledge in the society. And maybe generate new knowledge, thus, the value of stock knowledge can be increased. The library website can easily provide library education for users, let the education mode combine online and offline to teach users how to use library resources and services.

2.6. **Communication and interaction**
This function enables the user’s ideas to be conveyed to the library. It can not only effectively solve the problem of users, but also improve the service quality of the library. Library use website to communicate frequently with users, and understand what users need in communication. Library website builders need to
connect library and users closely on the library website, care about the users experience of using the site, and maintain a close contact with users.

3. MULWC security demand
The security demand of MULWC means that users can use the site in a relatively secure network environment. In the user security requirements experience, the library website need to make the users personal information will not be disclosed, to have a good confidentiality, to have a good background control, to make the library website server will not be hacked, to keep there is no illegal information or bad links on the library website, etc. These factors can affect the security level of the library website. The security requirement must have the library website security module construction. Library website builders need to ensure that the site can reach a high level of security usage and run in a secure environment which is the website security system (Figure 1).

![Website Security System](image)

**Figure 1. Website Security System**

3.1. Network security
The CMULW is inseparable from network, and various network security vulnerabilities can affect the security of the library website and user experience. It is necessary to ensure network security, and also it is the basis of security requirement for users. Although network security threats exist objectively, but the risk can be controlled or avoided. In the MULWC, rather than passively waiting for the emergence of network security issues, the library website builders should take the initiative to guard against it. On the one hand, the
library website builders should actively protect the network of library websites, on the other hand, users also need to enhance their own network security awareness.

3.2. Library website server security
Library website server security management is one of the important contents of website security management. Website server management and maintenance can provide sufficient guarantee for the safe operation of the website.[7] The first is the protection of the server room, through a regulated system keep the library website safe. The second is to keep server communication of high quality, ensure that qualified and stable transmission routes and network communication are maintained, make sure users get a comfortable browsing experience. Third, the web server equipment must have been secured to protect web applications from distributed denial of service attacks. Supports content filtering to prevent network attacks, such as SYN Flood, Teardrop, Ping-of-Death, Smurf and other malicious attacks. Furthermore, the server own security protection includes firewall protection, patches update, routine security configuration and maintenance, etc.

3.3. Library website interface security
The library website interface is convenient for maintainers to manage and maintain the website. Through the library website interface, website maintainers can monitor the status of the website at any time, or make maintenance adjustments to the website. In some case, the library website interface also has the possibility of being exploited by hackers. Website maintainers need to prevent irrelevant personnel from using the external interface of the website, such as hackers can use the remote desktop and other tools to access the library website server. The second is to pay attention to the access of the network protocol used by the library website and quick entry for developing website. Website management requires effective management and control of all interfaces to the library website, and need to ensure that the data in the network environment is complete and confidential.

3.4. Library website login authentication security
The login authentication system of library website is to protect user’s privacy, personal information and browse information. On the other hand, it is to facilitate website management and monitor users browsing behavior. Library website login strictly unified authentication, and guarantee one person an account. When users browse the library, website encountered an error page, website maintainers can discover and solve problems in time. When users account exception occur, website maintainers can also detect and stop users inappropriate browsing behavior such as excessive downloading, unknown non-security links browsing, etc.

3.5. Library website security system
The safety of library website is inseparable from the effective safety management system. The first is to base on technical strength of library website to formulate the technical depth of system management. The second is to base on the risk requirements of the library website to formulate the risk prevention countermeasure that suit oneself actual situation. Library website builders need to make a combination of technical means and management measures to deal with security issues, and to form the security management system of the library website.

4. MULWC humanistic respect demand
The humanistic respect demand of the MULWC is the users who use the library website for a long time to produce a need for website dependencies. This dependence is pleasurable for users and is essential for daily work. Let users to make it a habit to use the library website, it is the pursuit that the MULWC must pay attention to.

4.1. Simple and beautiful design
Library websites should be accessible easily, and can embody the user-centered service ideas. Make sure library website fits most user’s usage habits. The effective method is to adopt contracted and beautiful website design. It is the goal of website designers to achieve the best expression through simple and beautiful expression.[8] The main characteristic that contracted beautiful website design is to delete all unnecessary redundant design. Through professional and convenient navigation in this design, library website can quickly reflect the information required by users. Using library website can give users a relaxed feel.

4.2. Enhance user communication
MULWC should always respect the needs of users, and let users wishes be valued and satisfied. This kind of respect demand can be understood as the user can get timely solution when having opinions or suggestions, and maintain an interactive mode with the user for a long time. To this end, library website builders can set up a website interaction column and to establish an interactive communication platform with users online or offline. Users can interact with librarians at any time through the Internet and can truly become participants in the website construction, which will play an important role in promoting the improvement of service quality and website level. This interaction can also use a variety of ways, such as conduct regular site satisfaction surveys, answer the hot questions with high attention of users on a regular basis, set up the director mailbox, etc.

4.3. Good website maintenance
The library website needs to be maintained to implement the user’s ideas and suggestions. The MULWC should be improved and developed in the direction desired by the users. For the maintenance of computer websites, it is necessary not only to update the information displayed in the website in a timely manner, but also to control and manage the various items in the website. So website maintenance is essential work. Good website maintenance can ensure the stable operation of the website, and can strengthen the website construction according to the reasonable suggestions of users. In the future work, through the maintenance of the website, the library can timely discover the new needs of users to improve and strengthen the MULWC.

5. Conclusion
The above analysis shows that the MULWC should meet the basic function demand, the security demand and the humanistic respect demand of users. The MULWC needs advanced science and technology, and also needs a kind of construction idea to meet the needs of users in all directions. The MULWC is not only satisfying the realization of user value, but also indirectly improving self-value. Users are the users of the library website, and are the participants and supervisors of the MULWC. The basic attitude and development path of MULWC needs to constantly discover the demands of users and try to meet these demands.

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