

# *Public Education and Public Service of Museums Based on Content Management Technology*

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**Abstract:** Museums are important cultural institutions for inheriting civilization. In order to adapt to the advent of the Internet age, museums should use modern tools to enhance their vitality image and public cultural service efficiency. Content management mainly refers to the meaning of the processed object, and content management is based on the meaning of the processed object. The content-based processed objects include data objects, document objects, multimedia objects, program objects, knowledge objects and so on. The digital library framework based on content management technology can provide a unified management framework for digital libraries, effectively realize the integration of information resources and application requirements of digital libraries, and at the same time lay the content foundation for realizing the public education and public service functions of digital libraries.

## **1. Introduction**

Museum is a holy place for collecting, preserving, researching, spreading and exhibiting human beings and their witnesses, an ideal place for people to enlighten their wisdom, cultivate their sentiments, appreciate art and enjoy cultural leisure, and also a patriotic education base for spreading cultural knowledge, improving citizens' quality and improving the degree of social civilization. While making the museum move towards the modernization track, it also took the step of opening the museum free of charge [1]. This is an initiative to show humanity, with epoch-making significance, which plays a very important role in exerting the public service and educational function of the museum, making the museum really use the exhibition of national cultural relics as a means, thus building a bridge of cultural communication with the people.

In recent years, a content management technology, which originated from the publishing media industry, has been widely concerned by enterprises and IT fields [2]. Content management is the core part of information resource management. In order to improve the level and efficiency of public education and public service ability of museums, we must pay attention to the methods and techniques of content management in the construction of museum archives informatization, so as to improve the efficiency and quality of informatization construction.

## **2. The Background and Motivation of Strengthening Public Education and Public Service in Museums**

In recent years, with the long-term stable development of economy, science and technology and culture, all kinds of new knowledge and new technology have developed rapidly, which have had a far-reaching impact on all aspects of society. People's awareness and thirst for knowledge, culture and skills, as well as the need for employment or the society's need for high-quality talents, make the society present a learning-oriented development trend, but single and staged school education can no longer meet people's needs to enrich themselves. Therefore, during this period, museums not only got unprecedented development, but also as public cultural facilities with a large number of educational resources became an important place to comprehensively improve the public's scientific and cultural quality education, an important place for “lifelong education” and students' “second classroom”, as well as a good place for leisure, entertainment and sightseeing [3]. A large number of spectators came to knock on the door of the museum and flocked to the museum, prompting the museum to shoulder the responsibility of serving and educating the public.

In addition, libraries in various countries may attract people's attention in a short period of time after they are opened free of charge. People rush to visit museums, but after this upsurge dissipates, people's curiosity and enthusiasm for museums gradually decline. Therefore, in order to attract the public, museums have to further strengthen the quality of service, the ways and methods of educational activities, and the themes and contents of exhibitions, so as to shape and expand the image and influence of museum public institutions and further win the attention and support of the society.

## **3. Present Situation of Digitalization Construction of Museum Public Service**

### **3.1 Display and Utilization of Digital Resources**

At present, the pushed contents of collections in museums mainly include pictures, videos, magazines and exhibitions, etc. Users can better share and experience the collections in museums through social network systems. Using advanced and modern social tools, museums not only publish the information of exhibits in the museum, brand marketing and explain the exhibits in detail for the vast number of users, but also develop a new type of mobile terminal social media platform through organic integration with computer cloud data to answer various difficulties faced by the vast number of users in the process of visiting exhibits.

Compared with the traditional visiting mode, it can not only effectively solve the problems that the collections in the museum cannot be exhibited effectively and the visiting time is limited, but also the visitors can get free information of exhibits in the museum and the recent activities.

### **3.2 Digital Collection of Collections**

With the rapid development of science and technology, great changes have taken place in the mode of keeping museum collections. All the cultural relics entering the museum should be scanned digitally, and professional computer software should be used to model and save them later.

With the advent of the Internet and the era of big data, the computer 3D scanning technology has also been effectively developed. From the beginning, it only scans the model and gradually develops into a complete color coverage of the scanned cultural relics. High-definition computer data technology can effectively restore every detail of cultural relics in the museum, and even repair some damaged cultural relics. With the development of high-speed computer storage and data processing technology, the collections in museums are managed digitally.

### 3.3 Informatization of Museum Management

According to the actual needs of museum business activities (collection, storage, research, exhibition and education activities) and business activities (organization, personnel, funds and facilities management activities), various museum information management and service systems are established to provide services for museum staff and the public.

### 4. Content Management Technology

Content management refers to the orderly process of organizing, classifying and managing information resources of various formats and media types within an organization [4]. Its basic idea is to separate the management and design of content. The design of page art is stored in the template, while the content is stored in the database or independent file [5]. Content management can make the website use common design elements and templates to ensure the coordination of the whole website.

A content management system should include at least the following four subsystems [6]:

(1)Content collection system: It collects, acquires, distributes, edits, integrates and transforms content, and can add metadata to support the definition and search of content components.

(2)Management system: responsible for the access management of components, content and release templates, and can record the version of content, the status of work flow, the setting of permissions and the updating process.

(3) Publishing system: responsible for quickly and automatically sending the content to the browser according to the established publishing template.

(4)Work flow system: responsible for the collection, storage and distribution of the whole content.

### 5. Ways and Means to Improve the Ability of Public Education and Public Service

#### 5.1 Constructing the Content Management Model of Digital Library

Digital library based on content management manages digital resources as content, and it organizes preservation, service and personnel together to support the whole process of structuring digital resources, including the whole process from creation, dissemination, use to preservation of content.

The content management model of digital library consists of four business systems (collection system, management system, publishing system and workflow system) and two storage systems (metadata storage system and content storage system). As shown in Figure 1:

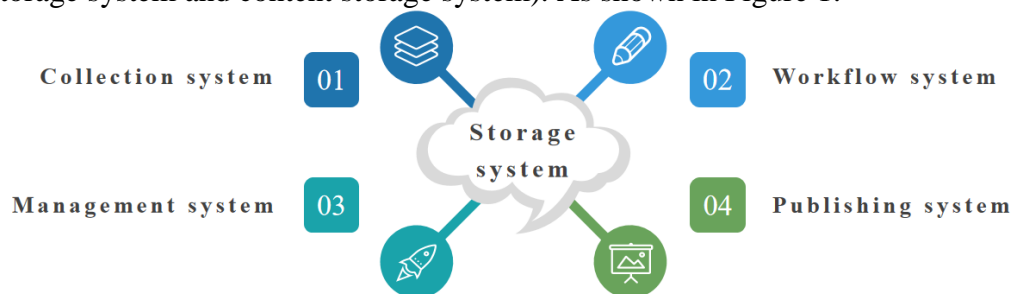


Fig.1 Content Management System Framework of Digital Library

(1)Gathering system

Collection system provides relevant tools and support for content collection, which mainly

completes the collection, creation, standardization and format conversion of content, and carries out metadata editing and content element definition.

(2)Management system

The management system is responsible for the access, maintenance and management of content, and can record the version of content, the status of workflow, the setting and updating of permissions, so as to quickly provide correct and effective content for the collection system and distribution system. According to the demand of digital library content management, generally speaking, the management system should include content maintenance management, rights management and copyright management.

(3)Publishing system

Content publishing system provides related tools and support for content publishing. The publishing system is responsible for quickly and automatically pushing the content from the content storage system to each portal according to the established publishing template. In the past few years, portal development has gone through four stages: Boolean search, classified navigation, personalization and integration [7]. The digital library portal should be an integrated portal, which not only provides users with a unified content retrieval portal, but also has the function of content classification navigation. For example, content navigation can be established by content type or classification theme.

(4)Work flow system

Work flow system is the whole process to ensure that content can run effectively and correctly from collection, storage to publication. As far as digital library content management is concerned, work flow system provides a complete set of working standard mechanism for content creation, maintenance, standardization, destruction and publication, and makes the work flow of digital library content management simpler, clearer in responsibilities and more accurate in content compared with traditional libraries.

## 5.2 Integration of Information Resources in Museum Archives Websites

The integration of information resources of museum archives website refers to the use of advanced technology, certain principles, norms and standards, to grasp and optimize the information resources of museum archives website in a certain range, and to organize it into an organic whole or unified utilization platform integrating relevance, dynamics and practicality.

Content management system mainly supports the management and access of various types of information on heterogeneous platforms, and information includes structured and unstructured information. How to manage these information becomes the key to the integration of information resources of museum archives websites. Structured information can be directly stored in relational databases. How to deal with unstructured information has become the key to the integration of information resources in museum archives websites.

Unstructured information is generally described by metadata model. Metadata describes a specific resource object, can locate and manage this object, and is helpful for resource discovery and data acquisition. It is data about data [8]. The metadata of museum archives website is shown in Table 1.

*Table 1 Metadata Table For Content Management of Museum Archives Website*

Element label	Element name
Title	File name
Description	File description
Source	Subordinate units
Date	Archive date

Format	Resource format
URL	Resource path
Grade	security classification

The Web page exists in the form of Html. in order to collect the content, we must distinguish the Html tags of the Html source file from the text, thus forming the text into two Stream:Html tag Stream and text stream, so that the web page content can be converted into an easy-to-handle form.

The principle of full sharing and delivery is one of the aims of document network system based on content management technology. A large amount of unstructured information can be obtained and utilized by users through the information publishing function and information retrieval function of the network. In the construction of document network, we should follow the principle of full sharing and transmission of information. Only in this way can we maximize the role of documents and archives and realize the value of museum archives information resources.

Document network system based on content management technology is a system platform for unified storage, management, comprehensive retrieval and distribution of different types of information. System construction includes information website construction and digital file management system construction. The two parts work together to complete the following functions: electronic document processing and archiving, document and archives digitization, document description indexing and statistics, electronic document and archives collection, multimedia information collection and access, digital museum archives information safe storage, digital museum archives information processing, document museum archives information network publishing, retrieval and utilization.

### 5.3 Get Services Instantly

In the museum, through the wireless local area network system, the access points in the museum can be fully covered, and the collections in the museum can be located in real time. Effective use of algorithm correction, detailed analysis of the path and footprint visited by each visitor.

In the places covered by the local area network in the museum, the positioning terminal equipment worn by the relevant staff in the museum can send out periodic signals, and when the APP system receives the signals, it can transmit the signal information provided by it to the server. The location server can accurately determine the specific location of visitors according to the time difference of signals and the strength of signals.

If the intelligent terminal system is relatively close to the collection in the museum, the push information program sent by the intelligent terminal system and the browsed content can be transmitted to visitors through the mobile wireless network system. The terminal equipment can access the contents of the server through the browser, and the content server can also transmit the information content of the collection to the terminal equipment according to the actual location information in the exhibition hall, thus realizing real-time interaction with the terminal equipment.

## 6. Conclusion

Museums, as public cultural facilities and with a large number of educational resources, have become an important place to comprehensively improve the comprehensive quality education of public science, culture and art. The public service and educational functions of museums have become and will remain a central task vigorously carried out by contemporary museums. This is the pulse and call of the times, and it is also the result of the objective development law of museums. Capacity management is not only a concept or a separate technology, but a comprehensive application combining human activities with various traditional and advanced technologies.

Introducing content management into digital library and building a digital library model based on content management will be a very appropriate choice for digital library with unstructured information as its main component. It is conducive to improving the ability of public education and public service.

## References

- [1] Khozin M, Mahendra G K, Nugraha A F. *Evaluation Of Public Service Standart (Case Study At The Education And Training Agency Of Yogyakarta Special Region)*. *ARISTO*, vol. 8, no. 2, pp. 239, 2020.
- [2] Akmal A, Muchtar H. *Bureaucracy from the Human Rights Perspective and Its Effect on Public Service*. *Journal of Moral and Civic Education*, vol. 2, no. 2, pp. 52-63, 2018.
- [3] Surip M, Gafari M, Pulungan H K. *The Role of PPID in Implementing Policy, Service, Publication of Public Information in State University of Medan*. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, vvol. 3, no. 1, pp. 387-394, 2020.
- [4] Hadley C J. *Leadership in the public service: tensions between local context and national training standards*. *Journal of Vocational Education and Training*, vol. 72, no. 4, pp. 607-607, 2020.
- [5] Vecco M, Srakar A. *De visitus non EST disputandum: How visitors to public museums cluster towards deaccessioning*. *International Journal of Arts Management*, vol. 20, no. 2, pp. 46-55, 2018.
- [6] Gavriluk V. *Advantages and disadvantages of social protection of public service employees*. *Social Law*, no. 3, pp. 42-47, 2019.
- [7] Huang W L. *The Impact of Extrinsic Rewards and Public Service Motivation on Public Employees' Work Performance: Does Seniority Matter?*. *Chinese Public Administration Review*, vol. 10, no. 1, pp. 12, 2019.
- [8] Smith C, Halinski M, Gover L, et al. *Generational Differences in the Importance, Availability, and Influence of Work Values: A Public Service Perspective*. *Canadian journal of administrative sciences*, vol. 36, no. 2, pp. 177-192, 2019.