Chapter 19
Research and Implementation of Self-Publishing Website Platforms for Universities Based on CMS

Liu Chong
Heibei Finance University, China

Wang Mei
Heibei University, China

An Wen Guang
Heibei Finance University, China

ABSTRACT
To update school websites, incorporating personality and ease of maintenance and management, the authors propose the use of a Content Management System (CMS). A CMS is a self-publishing Website platform for university information resources. The system has many features, such as self-service, fast station, self-service custom modules, dynamic replacement site style template, flexible adjustment of dynamic website contents and structures, search engine optimization (SEO) measures, and so forth. Each institution can customize according to their own information platform needs. A CMS greatly shortens the development cycle of the site and promotes the development of information technology on campus.

INTRODUCTION
With the rapid development of network information and the widely applications of the internet, teaching theory and practice caused profound changes. Educators are not only to teach but who also became a learning Navigator and the manager of schedule update. Universities are an important window as internal and external web content publishing. Its management system is undergoing a continuous improvement (Zhang & Huang, 2001). It will be a scientific, standardized, efficient and safe operation of the mechanism of the process. Development of network technology and
the update speed are very fast. University portal is not only reflection window of the university, but the exchange of information nodes. How to keep the site fresh and management is a daunting task. At this point the content management system can take advantage of school resources and scalability, so as to meet the requirements of college teachers and students. This paper fully analyse the characteristics of the system and gives the solution on the problems.

**STATUS AND PROBLEMS OF UNIVERSITY WEBSITES**

1. **System of Websites is Vulnerable**

As the technology behind the construction, many sites, especially in the virus outbreak era, are vulnerable to be attacked by hackers and Trojan (Budin, 2006). Once under attack, websites are easy to crashed, and can’t function properly. They could be used by criminals who will tamper with information, and seriously damage to the school’s image.

2. **Unable to Share Resources and Information**

Since the early construction of the site can not be unified planning and standards, even unified management platform, the school department faculty websites have to be fragmented. Meanwhile, among the faculties, websites and applications are difficult to share information. Because of this, websites are not integrated so as to form the independent silos and sharply reduce utilization of information resources (Laplant, 2006; Van Der Aalst & Van Hee, 2002).

3. **Poor Flexible and Weak Functions**

Many sites just do some accumulation of information, lack many useful features, such as a variety of unstructured (pictures, accessories, multimedia, etc.) and management of large files. There is no full-text search system. It also cannot control the viewing permission of the website content. The websites lack to customization features and the necessary functional components which are used to interact (McDonald & Stevenson, 1998). The content layout of the site is inconvenient to use, making the whole site forms so stiff. When the site needs to be adjusted or upgraded the revision, it leads to much more workload, or even need to re-construction. However, when it comes to the contents, they must be concerned about the poor efficient management. The information of manual link audio often can not be accessed; Poor system scalability, when it could be integrated with other applications, making the flexibility of the system reduced.

4. **High Running Costs and Non-Standard Maintenance**

As the various departments and faculties (Bota-fogo, Rivlin, & Shneiderman, 2002) have a relative independence of the websites, the maintenance on website content is often concentrated in a single department which can not be maintained by collaborative people who are coming from multi-sectoral. It is means that we lack standardized methods to maintain the site information. It is difficult to update. The servers, operating systems, information publishing softwares, database and other software vary with different applications. But each system has its own implementation, resulting in site maintenance and management costs are high, and wasting a lot of manpower, material and financial resources.