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Assignment 2

CIS 320

Due: 1/25/2019

Content Management Systems

1. **What is CMS?**

Content Management Systems (CMS) are sets of tools that can be used to create and manage a site’s contents by using computer software. This computer software can be used to create, customize and manage information with ease of use. CMS can be combined with other software applications which then it can be either set on a network, the internet or you could have it set up locally on your computer. CMS today are very useful, and their use has increased since most users do not require programming knowledge or writing lots of Hypertext Markup Language scripts, since they are very easy to use for users of any experience level.

1. **What types of capabilities does it provide?**

Content Management Systems (CMS) has many capabilities some of them include to create and to improve websites business process and their web presence. CMS is also being used for enterprise content management (ECM) and web content management (WCM). Which enterprise content management has the capability of allowing multiple users to collaborate on the same workflow by integrating document management, digital asset management and records functionalities, and providing end users with role-based access to the organization's digital assets. While web content management (WCM) facilitates collaborative authoring for websites. enterprise content management software includes a WCM functionality, but ECM remains behind the organization's firewall.

1. **Identify five open source CMS tools (of differing degrees of power). What are the strengths and weaknesses of each of these products?**
2. **WORDPRESS:**

* Advantages: User-Friendly System that requires no technical expertise which can be up and running within a few minutes.
* Disadvantages: according to my research the number one disadvantage of using WordPress is Vulnerability, since WordPress is an open source anyone could build WordPress themes and plugins, with no organizations to monitor them. maintenance is the second disadvantage since WordPress rolls out updates very often, to fix security flaws.

1. **Drupal**

* Advantages: Drupal has built in access control system which can be very helpful as we need to set different roles and permissions to prevent any data misuse. Drupal is also being used by University of Colorado, University of Minnesota and many other universities as its more secure than any other open source CMS tools.
* Disadvantages: Drupal has a complex interface which is not user friendly which means the creation of the site for inexperienced users may require some time to learn and understand the functions of the system.

1. **JOOMLA**

* Advantages: Joomla was created as a balanced WordPress and Drupal since its easy to use and has great security features, Joomla’s focus was on creating corporate websites, online magazines and many more.
* Disadvantages: even thoughts it is balanced between Drupal and Word press, the disadvantage that it has is that it's still more complex than WordPress and may require time to learn.

1. **Typo3**

* Advantages: typo3 has many advantages and the main focus one is the safety that it includes, which is strong compliance tool and verification system that are always up-to-date, typo3 also includes permission rights and levels for backend users, as this could help prevent any unauthorized write permissions.
* Disadvantages: very complex to use as its not user friendly. Requires medium to high level of technical experience to set-up and maintain which means spending more money on staff.

1. **PHP-Fusion**

* Advantages: PHP fusion comes with great tools and feature that allows you to fully control and customize your site, it also includes a good security system and helpful community when encountering any issues.
* Disadvantages: Although PHP-Fusion is very customizable and allows you to fully control and customize the site, it does need a certain level of programming skills.

1. **Identify five proprietary CMS tools (of differing degrees of power). What are the strengths and weaknesses of each of these products?**

Proprietary CMS means that someone owns it, even though it is free of use there are limits to what you can do with it, which in some cases requires special development license, which also doesn’t always give you the right to duplicate the application.

1. **Kentico**

* Advantages: this system uses ASP.NET and Microsoft SQL server for development through portal engine, it has been used by top brands including Microsoft, Ford, Sony and many others.
* Disadvantage: serves mostly large corporations such as the ones listed above which will require a large budgeting system. Very complex to use, non user friendly and requires well trained employees to use it.

1. **Pixpa**

* Advantages: an all in one website builder made for creative professionals and small businesses. Has drag and drop feature which is very easy to use. Also offers integrated marketing and revenue generating tools, including ecommerce platform, client galleries, and blogging features.
* Disadvantages: does not include a domain service, which will require additional software and or purchase then connects it.

1. **dotCMS**

* Advantages: suitable for documentation management applications, it also includes a statistical marketing tag which includes site visitors, and demographical information which can be helpful in determining changes that needed to attract more.
* Disadvantages: based on my research it does require root access to have server permission to install things like Apache Tomcat (used for java supported pages)

1. **Movable Type 7**

* Advantages: very scalable software, grows as the size of your site grows, which requires one installment to manage multiple sites/blogs
* Disadvantage: requires time for the installation process and has very small community support.

1. **SITEFINITY**

* Advantages: very easy and responsive design, include all in one drag and drop editing, requires a small amount of training compared to other competitors.
* Disadvantage: is not e-commerce or blogging friendly, also requires subscription which requires additional cost to the department.

1. **Which one of the ten tools would you recommend for our client and why?**

Based on my research out of the ten tools I would recommend is WordPress because is a free open source that requires no payments or subscription, WordPress is also the easiest out of all to use which allows UofL office of research directory or users to easily modify , update and control the content of the site with no development experiences. 2

**Payment Management System (PMS):**

1. Payment management system refers to a system that can manage payments like transferring funds, bill payment, money transitions etc. it provides disbursement, grant monitoring, reporting, and cash management service to both who are awarding the fund and receiving the funds. It is a secure online grant payment system for recipients and donors by providing payment related activities from the time of award to closeout. It helps to maintain and secure the funding agencies and federal government reports with risk free.
2. Capabilities/limitations of the system:

Payment management system is handling all types of payment from paying water and electricity bills to federal payments like taxes. Payment management system not only manage the payment, it also manages all types of money transaction. If you want to transfer a fund to the person you want, it can be transferred at any time without any delay. Payment management system assist awarding agencies and their grant recipients to identify grants with expired balances for timely recovery of the expired funds and closure of the grants.

Every system has their own limitation and restriction. As talking about the payment management system limitation, there are some restrictions which payment management system does not allow. If the grants that you are receiving has some amount limitation, you are allowed to use only those amounts. Using more than awarded amount will have negative consequences and we might have to pay charges.

1. Identify seven payment systems. What are the strengths and weaknesses of each of these systems? What are their cost structures?

There are many types of payment system services available in today’s century. The seven most important payment system that I found are:

1. **Braintree**:

**strength:** customers can pay in app, in store or on the website. this PMS is capable of running on both iOS and android and keeps donor’s personal information private

**Weakness:** Customer Service closes on weekends

**Cost Structure:** 2.9% fee + $.30 cents per transaction.

1. **Fundly**:

**Strength:** Enable the transaction and payout capability with single integration. Strong Mobile Platform with good customer service support.

**Weakness:** Unfamiliarized brand which isn’t particularly know.

**Cost structure:** 4.9% fee per donation and possibilities of other fees.

1. **2Checkout**:

**Strength:** offer all major payments cards, supports fifteen languages, and eighty seven currency types.

**Weakness:** making payments across counties charges you additional 1% fee.

**Cost structure:** 2.9% + $0.30 per transaction + 1% for international

1. **PayPal**

**Strength**: Most popular and used online PMS to date, with over 153 million users.

**Weakness:** Disputes can cause many issues to the PayPal account which even includes locking and limiting the access to your account.

**Cost Structure:** PayPal takes 2.2% + $0.30 fee per transaction

1. **Skrill:**

**Strength:** Skrill allows you to send and receive money, store cards, link bank accounts, and make payments with just your email address and password. support more than 30 countries.

**Weakness:** Skrill support does not always respond quickly. If your gambling transaction is delayed, the issue can be resolved within a few days.

**Cost Structure:** Businesses making up to $3,000 in sales are charged rates of 2.90% plus $0.29 in fees.

1. **Stripe**:

**Strength:** Works worldwide and accepts all major credit cards and can be integrated into the site.

**Weakness:** required technical skills or developer resources to customize.

**Cost Structure:** 2.9% per transaction and additional $0.30 fee

1. **Amazon Pay:**

**Strength:** you can get extra security of amazon fraud protection with no additional cost.

**Weakness:** price differences for domestic and cross border user.

**Cost structure:** .30 cent/domestic user U.S transaction. 3.9% for cross border

**4. Address some basic security issues associated with these systems.**

* Any misuse/abuse could result in donor’s confidential information to be leaked.
* Security flaws with the security verification system could cause issues.
* Bank Fraudulent activities or chargeback.
* Linking bank cards to PMS can be dangerous if there to happen a large data leakage.

**Recommendation to the client:**

Among all the payment systems the most secure and affordable payment system I would

recommended for the client is PayPal because it is the easiest PMS to use, as it is the most popular and secure PMS with over 153 million

users. The cost structure is also not high as compared to other payment systems. Its Payment structure only costs 2.2% + $.03 fee per transaction.