

Assignment 2

Austin Calhoun, Griffin Ford. Cardinals in STEM.

What is CMS?

A content management system is a type of software that is comprised of a frontend and a backend. A content management system allows a team, with different levels of access, to build and manage a website without the need of building from the ground up. This tool is also important that the knowledge of coding is not needed as the interface is user friendly. A content management system allows companies to manage their workflow in an efficient manner and is cost effective tool for the creation of websites with little overhead from management. CMS also act to collaborate, store content in one place, streamline automated processes and workflows.

What capabilities do CMS typically provide?

CMS provide the following functions:

Optimization: of website traffic to increase the website ranking.

Content storage: in a CMS is done by means of a database, of which allows easy access for team members and collaboration.

Workflows: are easily designed and assigned increasing seamless business processes. Automation can be implemented to increase business process workflow.

Publishing: allows for transition of content from inactive to active by set due dates.

Content creation: decreases the amount of skill needed by team members for content creating and maintenance of the information architecture.

Five open-source CMS tools. What are the strengths and weaknesses of each of these products?

1. **WordPress** - is easy to set up and start working with and has minimal cost associated with ownership and startup. WordPress also has many an abundance of themes and

plugins to choose from. The cons with WordPress are that security risk is increased as is any open-source CMS. WordPress is not the most suitable for use on high traffic sites.

2. Drupal - is scalable and more customizable compared to something like WordPress.

Drupal has built in user control interfaces to create custom user roles. Because Drupal is very flexible it can be simple or complicated allowing it to better fit a business. The cons with Drupal are that the initial setup of Drupal is quite difficult. Updating the CMS is very important. The best modules are not free to use.

3. Joomla - uses templates and extensions. Joomla is great for managing a lot of content but is weak with the customizability aspect therefore can be good for beginners and is often easier to use than WordPress's UI. The SEO(search engine optimization) is great with this tool. The cons of Joomla are that it can be very simple or too complex depending on the desired website. The large number of extensions are not very impressive and paid versions may need to be relied upon.

4. Grav - fast CMS because it is a flat file CMS therefore does not need a database to save content. Powerful plugins make it versatile. Can be easy to scale the CMS for small websites. Wide variety of free tools to choose the design of the website. The cons are that Grav has limited support and a steep learning curve compared to other CMS.

5. Ghost - fast and easiest to learn CMS of the open-sourced list. The main use of ghost is to grow business by sharing content. galleries, gifs, audio, downloadable files and more. This makes this CMS very useful for sharing content with an audience. The cons are that it requires subscription. Limited customization and has more specific use cases than other CMS.

Five proprietary CMS tools. What are the strengths and weaknesses of each of these products?

1. Sitecore - has out of the box high security level, great content editing and scalability.

Sitecore Many sought after features come default such as personalization, analytic tools and and segmentation. The cons of Sitecore are that it can be quite expensive for acquire a license. To manage the backend of the website it can be necessary to need customer service which can be an additional cost if developers are needed to implementation.

2. **Kentico** - Simple use interface that can be designed for custom workflows. Can be used to build complex interface websites for a variety of industries. The con is that its best at nothing but offers a general fair performance in all areas.
3. **Omni** - Very flexible system and if used with a good knowledge base of the system can be great system to scale form and have good UI for users. Cons are that knowledge of HTML is no good. the less know XSLT language is needed to code with this CMS. The use case for Omni is usually education.
4. **Sitefinity** - strengths around page creation, template management and document management. Sitefinity is used with common coding languages like HTML and CSS. Cons are making changes to the website can make it unstable and updates to the firmware are slow.
5. **Oracle WebCenter** - can handle large amounts of data and publishing is very easy. Good workflow, caching, and scalability. Cons are that its a more expensive option with cheaper alternatives.

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

We believe that an open-source CMS tool is best due to the mix of cost and security being the top priorities. A CMS like Joomla is our recommendation. Joomla is easy to use, has good scalability and can be easy to use for personnel not accustomed to using a CMS. Joomla does not offer the best extensions, but the extensions are plenty good enough to expand the website if needed. There are core security features that are built into this CMS.

What is CMS?

A payment management system is a way businesses and organizations to keep track of, manage, and accept payments from customers and/or donations. A functioning payment system is crucial for an organization or business. They can create journal entries for businesses, running queries into where certain grants, funds, or money is located within a company's system, and accepting, recording and processing payments that the company receives. They help provide companies with a reliable, transparent and paperless payment recording process, where payments and their related information like customer names, date, card number, etc... can be recorded instantaneously and without having to have someone go into the background and manually enter it. This is huge for companies, especially in the nonprofit world, like the Kid's Center of

Louisville, because most nonprofits have a board of trustees or an analogous oversight structure, that they have to report information to. When one process like payments are recorded the moment a payment occurs, this is one less issue for the company or organization to worry about.

The seven types of payments:

Cash

Card

Mobile Payment

Checks

Direct Deposit

Wire Transfers

Standing Orders

What are the strengths and weaknesses of each of these systems? What are their cost structures?

These types of payments all have their own pros and cons. Things like cash and checks have the advantage of being instant, no risk of over or underpayment, and you don't need to be connected to the internet for a transaction. On the downside of cash and checks, you must manually enter the payment into the ledger each time, and the money could get stolen. The pros of the other items would be that the record of the transaction instantly would get recorded into the ledger, most card transactions are secured and/or insured by the card company, you won't have to worry about inaccurate payments, and you won't have to worry about someone from overseas not having the correct currency.

Address some basic security issues associated with these systems.

Of course, with any transaction of money between people, there is the risk of security that each vendor and customer have to worry about. A great example of security issues that vendors face

when dealing with cash and checks as aforementioned, they could get stolen. If both parties are being responsible, the threat of theft should hopefully be negated. Of course, there are unforeseen situations where something crazy can happen, but hopefully that would help cease the stealing. When dealing with things like cards and mobile payments, they are mostly insured by the card companies, as well as monitored by these companies for any unusual activity that the user who owns the card might not have made.

Make a recommendation to the client for which system you feel best meets their needs.

We would recommend to our client, Kid's Center of Louisville, that they should use a credit card system to keep track of their payments. The client mentioned they were having trouble keeping track of their scheduling system, and using a credit card would allow the client to instantaneously track their records, and therefore be able to quickly report the information to the customer. A credit card system also allows the client to have an insurance that the payments they receive are accurate and secured, meaning they don't have to worry about their payments being stolen.