



Website Design Methodology

A WHITE PAPER

CYZAP'S PROVEN METHODOLOGY FOR CREATING
PROFESSIONAL WEBSITES

BY

GUNNIT KHURANA
RAMAN KHURANA

CYZAP INC.

address 7811 L Street
Omaha NE 68127
phone 402.697.1277

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fax 402.697.1343
e-mail info@cyzap.com
web www.cyzap.com

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1. INTRODUCTION

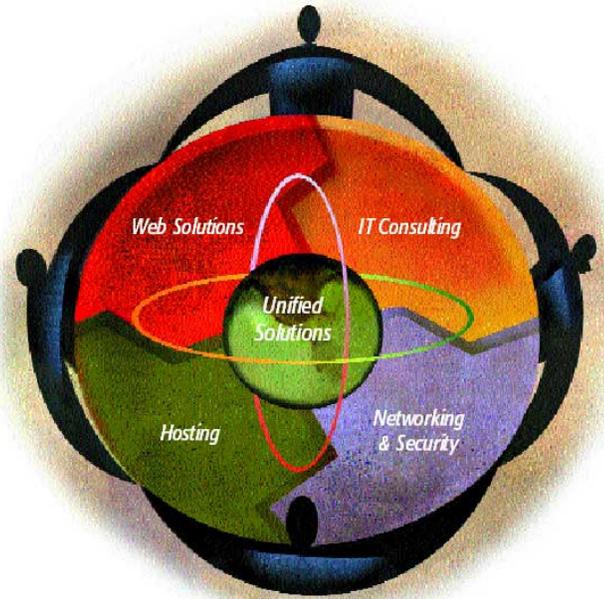
With the prolific growth of the World Wide Web ("Web") it has become a necessity for businesses to have a professional Website in order to maintain their competitive edge. The design and maintenance of a professional Website poses several challenges. This document provides an insight into the different types of Websites, the existing methodologies for design and deployment of Websites, and the Website Design Methodology followed by Cyzap Inc.

Cyzap has extensive experience in designing and maintaining enterprise-level Websites. Using our four key strengths – Web solutions, IT Consulting, Networking/Security and Hosting – Cyzap designs innovative and robust information technology solutions.

We put powerful and proven technology to work for our clients. That means they work smarter. More efficiently. And that means success - from day one.

This document is structured as follows:

- **Section 1 (Introduction)** describes the purpose of this document and provides an introduction to our company.
- **Section 2 (Types of Websites)** documents the different types of Websites that exist on the Internet.
- **Section 3 (Web Authoring Tools)** lists the different tools and approaches that are being used to design Websites.
- **Section 4 (ZapSite™ - Cyzap's Content Management System)** introduces our Flagship Content Management System. It also highlights the different types of "Interactive" Websites.
- **Section 5 (Cyzap's Website Design Methodology)** outlines the process that is followed by Cyzap to complete a Website design project for our customers.
- **Section 6 (Benefits)** lists the advantages of using ZapSite and following Cyzap's Website Design Methodology.

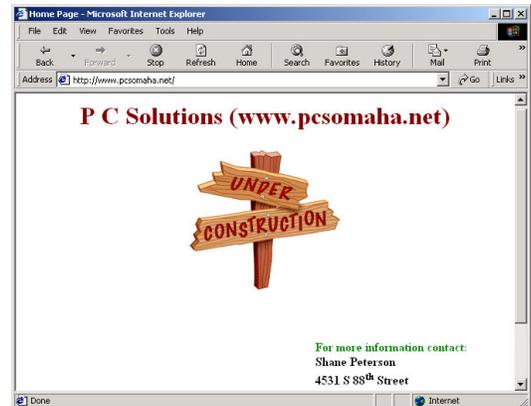


2. TYPES OF WEBSITES

It is possible to categorize most Websites into the following types:

2.1. Simple Intro Page

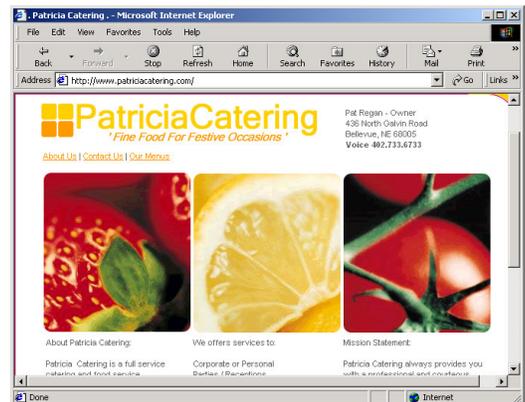
In this case, the Website is just a “glorified” business card. It is a “static”, one page site, which provides a little introduction about the business and the contact information.



2.2. Electronic Brochure

This type of Website provides more information about the company and the products or services. However, it resembles an electronic brochure in that the content never really changes.

Statistics show that majority of Websites fall under this category.



2.3. Keeps Fresh Content

This type of Website is a step above the “Electronic Brochure” Website in that the site owners take some effort to change the content on a periodic basis. Majority of such sites have a “News” or “Events” section that provides the latest happenings at the organization. The more elaborate sites will have frequent “facelifts” for the site to keep a fresh “look and feel”.

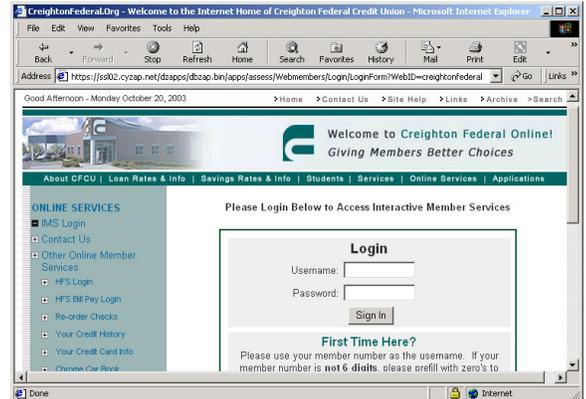
However, these sites are still considered “static” in that they do not allow the Web visitors to interact with the organization in any way. The most they allow would be a “contact form” or “request for more information” etc.



2.4. Allows Interaction

This type of Website is considered "dynamic" in the sense that it allows its Web members to perform "Online Services".

The Web visitors are encouraged to become Web members in order to gain access to the "members only" areas of the website. The login section and other services are database driven and provide the Web users with predefined services that are common to all Members.



2.5. Integrated with Business Processes

This type of Website provides the most functionality because the "front-end" services are integrated with the "back-end" databases. In this case, when a Web member logs-in, the Website provides them with a menu of services that are specific for them. The site "recognizes" the user who has logged in and then "customizes" the Online Services that the user can perform.



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Order ID	Created On	Property Address	Status
FNT-ORDER-8	4/20/2004	123 L Street	Committed
FNT-ORDER-7	4/20/2004	4045 N. 7th Street	Received/InProcess

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3. WEB AUTHORIZING TOOLS

All Websites are designed using Hyper Text Markup Language (HTML). HTML allows users to specify the content of the Website and the layout commands which control how the content is displayed. Over the years, webmasters have used the following methods to create Websites:

3.1. Direct HTML coding

In the early days, webmasters used to create website primarily by programming HTML layout commands directly with the content of the website. This made the process very cryptic and creating websites required a thorough understanding of HTML and its options.

```
<html>
<head>
<title>Home Page</title>
</head>
<body>
<div align="center">
<table border="0" cellpadding="0" width="100%">
<tr><td width="100%">
<h1 align="center"><font color="#800000">P C Solutions (www.pcsomaha.net)</font></h1>
</td></tr>
</table>
</div>
</body>
</html>
```

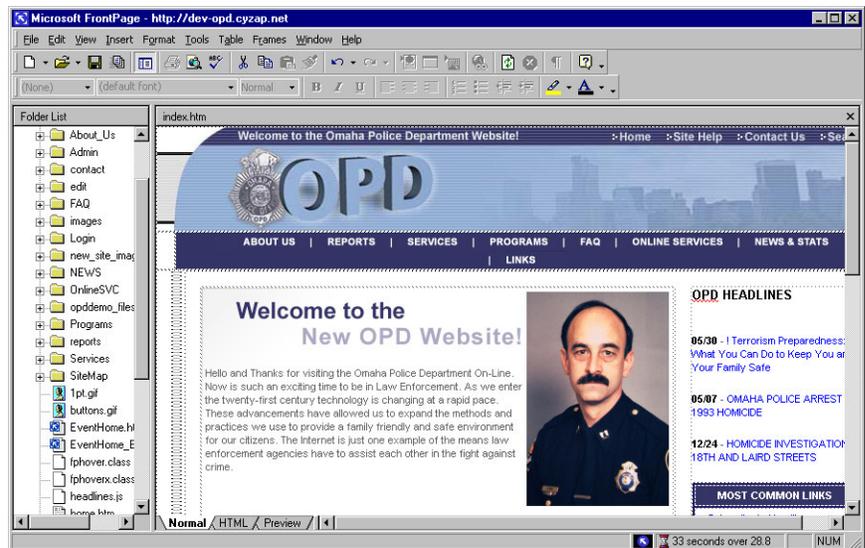
3.2. Website Editors

The next generation of Websites got created using Website Editors like Microsoft FrontPage® or DreamWeaver®.

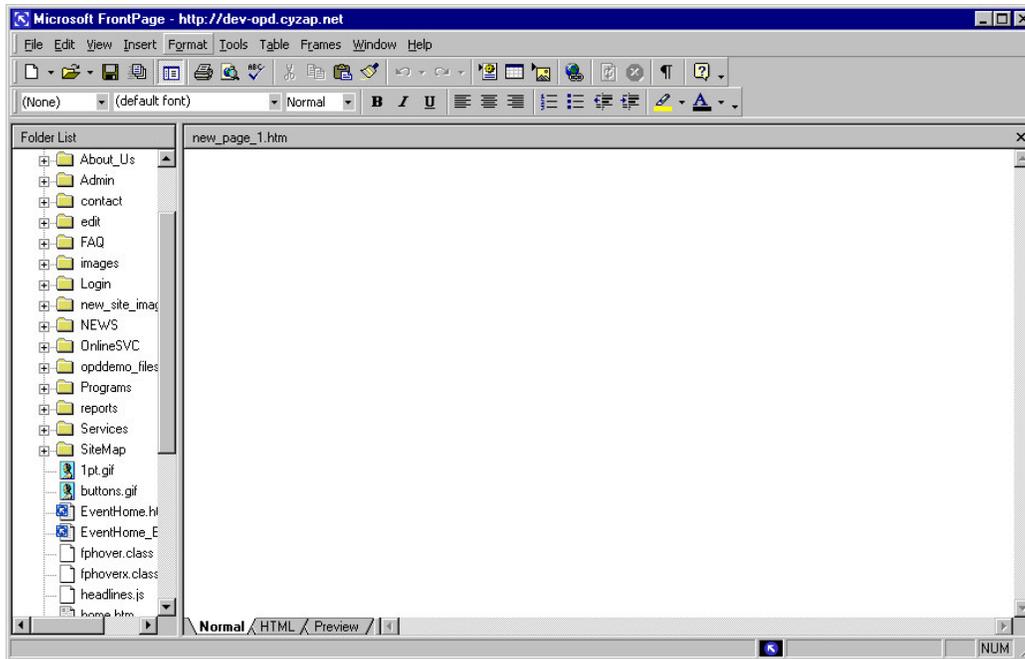
They allowed users to create Web pages using WYSIWYG (What You See Is What You Get) editors.

Now users could focus on adding content and format it using tools that resemble word processing tools.

The Editor would then create all the HTML Layout commands to format the content for the Web.



While the Website Editors make it simple for many people to author their own Websites, they are focused on "Page-by-Page" Layout and publishing. That meant that anytime a new page was added to the site, the designers would have to manually specify the layout and formatting of the page.



This led to several inconsistencies on the Website. The most prevalent problem was that of "Inconsistent Navigation". When new sections or pages were added to the Website, the navigation on some pages did not get updated to reflect those changes. Other problems included different "look and feel" for different pages for the Website, use of different colors on different pages, use of different fonts and type sizes for different pages, etc.

All these issues defeated the marketing and branding efforts of the organization !



ON THE TOP NAVIGATION, THERE IS A BUTTON FOR "WHAT'S NEW"



ON THE BOTTOM NAVIGATION, THERE IS NO LINK FOR "WHAT'S NEW"

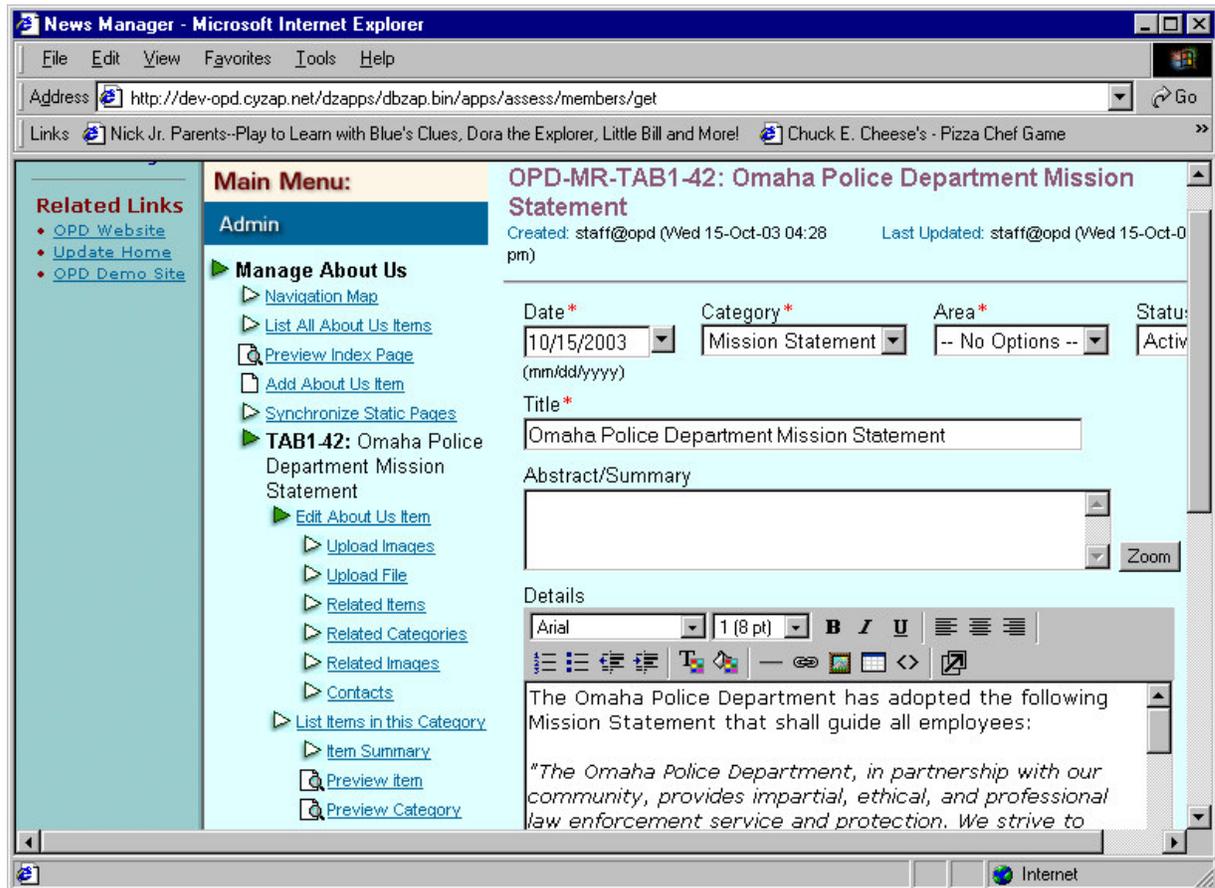
3.3. Content Management Systems

The problems posed by the "Page-by-Page" authoring systems led to the creation of Content Management Systems (CMS). These systems allow Webmasters to "program" the layout of the Website into the CMS and then allow users to add content by filling the content into appropriate fields of a form. All content gets stored in a database and the web pages are created using the CMS.

The CMS provides several benefits:

3.3.1. Separate "Content" from "Layout"

Once the CMS has been setup, the users do not have to worry about specifying the layout options for each page. They create a content item and assign it to the appropriate category and subcategory (if applicable).



3.3.2. Automatically generate the Formatting and Navigation Menus

Once the content has been added, the CMS formats the content based on the colors, styles, classes etc. that are programmed into the CMS for that Website during the initial setup. It organizes the content with a consistent layout. This ensure that all content "looks and feels" the same through the entire Website. In addition, the CMS creates the navigation menus dynamically as new categories, subcategories, and content articles are added.



3.3.3. Provide Enhanced Services

Powerful CMS systems allow users to easily added enhanced services that would normally require some programming by Web designers. Some examples of such services are:

- **Contact Us Form**
- **Site Search Form**
- **Online Ordering**
- **Email Subscription**

4. ZAPSITE™ - CYZAP'S CONTENT MANAGEMENT SYSTEM

Cyzap has created a feature rich CMS called ZapSite™. We use this product extensively to create sophisticated Websites that provide seamless integration with our other Web Application offerings. Users of ZapSite love its Windows Explorer® type design which breaks the navigation into context-sensitive horizontal and vertical menus.

Majority of the "Interactive" Websites fall under one of the following categories:

4.1. Store Fronts

Here, the Websites have the main purpose of selling merchandise. They provide their members an electronic catalog of all their items. Their focus is to make it easy for members to find items from their catalogs, get more information about the different items, and purchase one or more items using an online Shopping Cart. Most such sites have Real Time Credit Card Processing to accept payments from their customers.



4.2. Business Function Oriented

Here, The Websites is designed to emphasize the different business functions offered by the client. Such sites are used by city, state, and federal government agencies, and other public service centers. In this case, the visitors are at the website to get service and are already have information regarding the types of services being offered by the agency. So the focus is to make it easy for the visitors to access the different business functions.

For example, the Website for a City Police Department would focus on "How to file an Accident Report" or "How to get a copy of an Accident Report". The first business function is needed by any city resident that has been involved in an accident. The second business function is needed by Lawyers, Insurance Agents etc. who are involved after the accident has occurred.

4.3. Interaction Oriented

For Interaction-Oriented Websites, it is very important to identify all the stakeholders of the organization and what kind of information needs to be presented to them. In this scenario, the Website is designed with a perspective that it is the "Online Front Desk" for the organization. It contains different information for different visitors and is organized in a way that all visitors can easily get to the information and services that pertains to them.

For example, a credit union would organize its Website to have different tabs and sections for visitors interested in Loans, Savings, and other services. It would also allow visitors to fill in applications and perform other online services like checking their account balance, update their profile, etc.

4.4. News Portal

These types of Website give the look and feel of a newspaper or magazine. The main focus is to inform the Web visitors about the different events and other relevant happenings. Such sites are used by Associations and other charters, which service a specific industry. In this case, the focus is to provide the visitors with highlights of different pieces of information and then allowing them to get more details regarding a specific item if they desire.

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Mission statement of the Sports Turf Managers Association:

bers competence and acknowledgement of their professionalism.

<div style="background-color: #e0e0e0; padding: 2px;">STMA Top Five</div> <ol style="list-style-type: none"> 1. PowerLinks 2. Member Services 3. Chapter Events 4. Join STMA! Benefits 5. Learn About STMA 	<div style="background-color: #fff9c4; padding: 2px;">Gearing up for Phoenix - 2005</div> <p>With another successful Conference behind us, it's time to start gearing up for the future. That means Phoenix, Arizona, January 19-23, 2005, and the Hyatt Regency Phoenix and Phoenix Civic Plaza Convention Center.</p> <div style="display: flex; align-items: flex-start;">  <div> <p>The Hyatt Regency is located in the heart of downtown Phoenix across the street from Phoenix Civic Plaza Convention Center, Symphony Hall, Herberger Theater, and within walking distance to Arizona Center, Phoenix History Museum, Heritage Square, Arizona Science Center, America West Arena and Bank One Ballpark.</p> </div> </div> <p>Located in the heart of downtown's Copper Square, the Phoenix Civic Plaza is a 24-acre facility that has hosted national and regional conventions, trade shows, consumer events and theatrical productions since 1972. It has accommodated more than 35 million people, playing host to an average of 540 events annually.</p> <p>Phoenix is a premier destination, with more than 300 sun-filled days a year and average temperature of 74 degrees.</p> <p>SO — isn't it time to start gearing up? For Hotel rates and other information contact STMA Headquarters.</p>	<div style="background-color: #e0e0e0; padding: 2px;">TURFBLAST</div> <p>TURFBLAST - keeps STMA members informed of Association happenings, as well as industry information. You can link to current and past TURFBLASTS here.</p> <p>This is a members-only benefit, so you will need to log in for access. If you would like to receive the monthly TURFBLAST, be sure to provide your email address to Headquarters.</p>
<div style="background-color: #fff9c4; padding: 2px;">Introducing Sports Turf Managers E-Digest</div> <p>It's Official! The first edition of the Sports Turf Manager E-Digest - our new electronic newsletter is out!! Loaded with information on Association news, member news, research and feature articles, as well as the latest industry happenings, we're sure you'll find this to be a wonderful new "Members Only" E-Digest.</p>	<div style="background-color: #e0e0e0; padding: 2px;">Member Links</div> <p>*STMA Members* Log in to access the Link to the Michigan State University Turfgrass Information Center</p> <ul style="list-style-type: none"> • Members Home Page • Jobs, Jobs, Jobs • Update Address & Contact Info • Resource Library • Student Homepage 	

5. CYZAP'S WEBSITE DESIGN METHODOLOGY

There are several reasons why majority of the Websites are at the "Electronic Brochure" level:

- **Lack of Time**
- **Lack of Expertise**
- **Lack of Funding**
- **Lack of Vision**
- **Lack of Motivation**

Moving to higher levels requires planning, thought, and a proven process. At Cyzap, we implement the following process to produce professional Websites for all our customers.

5.1. Define Implementation Teams

Once the project proposal is approved, Cyzap begins the process by identifying the project implementation teams. In this phase, all team members and their roles (on Cyzap's side and client's side) are identified and documented.

We partner with a professional "Design Company" who helps the client with its branding efforts. The Design Company works with the client to come up with appropriate logos, colors, and other layouts that are consistent with Client's other marketing materials. If client already has a previous relationship with a Design Company, we are happy to work with them.

5.2. Create Site Plan

A "Site Plan" outlines the layout of the Website. It identifies all the stakeholders, outlines the main navigation tabs for the web pages, identifies different categories (and subcategories, if applicable) to which the different content articles are assigned. The site plan dictates the navigation of the Website and the representation of the business.

This is the most critical phase of the Website design. For a complex Website, it is advised that the executive, operations, IT, and marketing departments get involved at this stage to agree on a common site plan.

5.3. Create Layout Plan

Once the Site Plan is created, Cyzap works with the Design Company to come up with the Layout Plan. The Layout Plan specifies the placement of logos and the style of buttons, headers, text etc. The Layout Plan ensures that the "look and feel" of the Website is consistent with client's other marketing materials, thereby reinforcing the brand.

5.4. Content Gathering or Creation

This phase includes the development of the content that will be put on the Website. The content can either be provided by Client or can be created by copywriters or marketing agencies.

Once the above steps are completed, Cyzap populates the site plan into ZapSite. It also customizes its other Web Applications as needed by client or programs new features as required. Finally clients can either populate the content themselves or have Cyzap populate the content for them.

6. BENEFITS

There are several benefits in following this methodology:

6.1. Status tracking

The Website is designed in a methodological manner whereby it is very easy for client to track the status of the site at any point. This also ensures that client is able to provide feedback at any stage of the design, which eliminates any "surprises" at the end.

6.2. Content Population by Client

By using a CMS, Cyzap can offer clients an option to populate content themselves, thereby providing an option to reduce the overall project cost. Clients can also choose to maintain the content themselves by purchasing a license of ZapSite, or contract with Cyzap to maintain the Website.

6.3. Enforces Branding

This methodology ensures that the function of the Website matches the design. ZapSite works directly with client's Site Plan. Once Cyzap populates the Site Plan into ZapSite, it automatically creates the site navigation and ensures that all content adheres to the branding standards. Any content changes are formatted to match the site brand.

6.4. Easy Re-design

Since the content is separated from the layout, it makes it real easy for client to "facelift" or redesign their website. If the client wants to change the "look and feel" of their Website, then all they have to do is come up with a new "Layout Plan" and get it programmed into ZapSite. Once that is done, all content articles will be automatically formatted with the new layout.

For more features and benefits, please refer to the "ZapSite Feature Documentation".