

#### Introduction.

Place Management™: a new category of Internet Application

Working with organizations and businesses who express frustration at the lack of control over their website was the impetus for the concept of webmaster monopoly or webmaster ownership syndrome. According to the business user, the monopolization of the website by the webmaster affects the timeliness of messaging and staff productivity. The problem is rooted in the history of website development and tools.

Consider the case where a company is launching a new product and is using keyword marketing to drive visitors to the company website. They buy twenty keyword phrases and track the clicks over a two month period. To their surprise, the clicks generating the most activity represent messaging which is not effectively developed on the web site. They see visitors enter, but not stick to the site. To rectify this loss of stickiness, new messaging is needed as soon as possible, but the webmaster has a three week delay in posting the new messaging and adding the appropriate pages.

Deploying Place Management to break the Webmaster Monopoly

From a process-flow viewpoint, the monopolization of the website by the webmaster can be thought of as a many-to-one situation, where one person is servicing the needs of many.

This paper shows how users deploying website places or Place Management (PM) Applications can overcome the webmaster monopoly, improve productivity and subsequently increase ROI and the relevance of their website.

#### History of Website Development

Early Productivity Gains do not break the many-to-one webmaster monopoly

Building early websites started with hand-coded HTML pages. Thrilling as it was to see those first pages, the website monopoly syndrome was quickly identified by frustrated business users. Developers rose to the occasion by creating input forms where users could enter numeric or textual information into a database. The programmer then retrieved the information from the database through a scripting language and merged it with a pre-coded HTML page to create a "dynamic" web page in order to make tabular presentations of the data. The data was searchable through the use of an HTML form that produced results from the database.

The database method was successful from a productivity standpoint because only one HTML page was needed to generate an infinite number of "dynamic" pages, but unfortunately the dynamic pages were not searchable by a search program and a programmer was still needed to change the layout of the data on the page.



## Databases, Templates and Desktop Conversion

The use of templates was another early response to the webmaster ownership syndrome. Templates were pre-designed HTML pages which could be selected by the user. Empty spaces on the template could be populated by a form within an application. The template would be named, saved and then published to the web server. A few of the challenges in the template environment involved empty spaces, managing links, design consistency, integration of the templated pages into an existing website and reversing published pages, none of which was trivial.

Both of the above scenarios involve browser based implementations hampered by the fact that the entire page would have to be reloaded with each change, a condition exacerbated by the speed of the telecommunications environment.

Microsoft offered several user productivity solutions involving the conversion of Word™ to HTML or PowerPoint™-to-HTML and then FrontPage™, which provided a drag and drop approach to the production of web pages. But these solutions did not address the webmaster monopoly syndrome because the webmaster was still required to review and post the user developed pages to the web server.

### JAVA Innovates Browser Apps

Advancing technology brought more new solutions. Originally HTML pages were structured and columnar; however, a new programming language JAVA<sup>TM</sup>, invented by Sun Microsystems, provided desktop-like functionality to the Internet applications. The browser could download and execute a JAVA application, if there was enough bandwidth and if the firewall allowed a foreign program into the network. Because of the two issues, bandwidth and security, JAVA's popularity waned for use within the browser, but emerged for use in stand-alone applications.

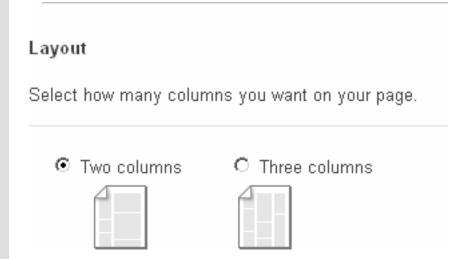
SiteBuilder™ provided by Yahoo! is an excellent example of a user-friendly standalone JAVA™ application for producing websites. But, because the application and all of the related source files reside on a single computer, its applicability is limited to a single person who is funneling all of the updates to the website. In this case, we have improved the productivity of the one person updating the website, but we have not changed the unproductive many-to-one webmaster monopoly.



#### Early Places

The layout approach was a precursor to the use of places. The application program would offer the user the ability to choose the number of columns on his page and then move content areas into various columns. Early portals used this approach. Some portal venders use the term "portlets" for those content areas assigned to different columns, although there is no industry standard for a portlet API. The picture below shows a typical column chooser for a layout approach.

Layouts, Portlets and DHTML windowing predated places in web development



HTML Frames and iFrames could also be thought of as early places. The iFrame solved the problem of reloading the entire page for each change of content. Images or text could be easily displayed into the iFrame.

DHTML(dynamic HTML) offered the drag and drop environment found in the Windows<sup>TM</sup> world to the browser user. Its early adaptation could be seen in menus and in portals. The Octopus personal portal was an example of a DHTML windowing application where each window could be viewed as a place on the page. Unfortunately DHTML development was limited due to browser inconsistencies in the execution of the code, so Octopus and other DHTML applications did not survive.



### Single Page Application (SPA) or Rich Internet Application (RIA)

Moving from the ultra-thin browser client where all processing occurs on the server and the thick client where most of the computing occurs on the user's computer as in the Java application or the proprietary Windows application, the era of the Single Page Application (SPA) has arrived. The SPA is a heavy browser application where JavaScript libraries, loaded by the browser, perform many functions that make the browser behave like a Windows™ application.

# New technology facilitates cost-effective browser-based Place Management

The technique involves the use of asynchronous JavaScript and XML. This new form of development is called Rich Internet Application (RIA). The SPA is a heavy browser application wherein the JavaScript modifies the page and the page takes on completely different behavior depending on the click. Fortunately telecommunications improvements occurred concurrently with RIA, so that the user does not notice the download of the potentially large JavaScript libraries executed by the browser. And, of course, JavaScript must be enabled in the browser.

With a Rich Internet Application, the functionality that early forms-based approaches tried to provide to create places can be achieved easily. Forms and boxes appear and disappear on a page without reloading the page, but provide extremely sophisticated user functionality.

Browser based applications are infinitely more cost effective than stand-alone client applications where you must incur a per seat or per copy cost to install and to upgrade the application. With a RIA browser-based application, all you pay for is the browser. RIA achieves the functionality of the stand-alone application at a fraction of the cost.

#### **Places**

A place is an area between two standard tags on a page. A Rich Internet Application called the Page Processor will invoke a specific Place Manager based on the tag instructions.

#### **Places Defined**

<place: do X>your website code here</place>

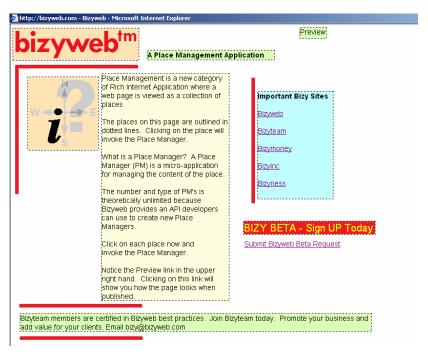
Simplistically, the above string of tags will be ignored when the page is rendered by the browser, but executed by the Place Manager when the application is invoked.

The Place Manager walks a non-technical user through the process of changing the contents of this Place.



Moving the cursor over the place indicates the type of place and the content it expects. Clicking on the place invokes the Place Manager.

## Insert Places into Existing Websites



#### Places and Your Website

# Many-to-Many Place Management breaks the Webmaster Monopoly

Imagine that you insert Place tags into your website around areas where you would like to be able to update the page. You might want to bracket an image, some text, some links or even the entire page. The RIA will read the Place tags and take action depending on the tag instructions, including changing/updating the text, the images, the links or even the underlying HTML, in the case of advanced users.

In the screenshot above, several places have been established: two types of text places, an image place and a link place. The dashed lines and different background colors appear in the application and indicate of the type of the place. Moving the cursor over the Place will select it. Clicking on the place will invoke the Place Manager, a micro-application for editing the Place. Clicking 'save' stages the changes until someone publishes the page making the changes permanent. Note that two people can edit the same page concurrently, but not the same Place. If two people try to edit the same Place, a message will appear saying the Place is locked for editing. Clicking on 'Preview' will show the place as the browser will render it.

In the next screenshot, the page is shown as rendered by the browser. Note the places are not visible.





The Place Management approach to website building breaks the webmaster monopoly by pushing the page updates out to the business user who is familiar with the business content. The webmaster spends his or her time on issues related to the infrastructure of the website and no longer deals with content issues. The unproductive many-to-one model becomes the many-to-many model, which is infinitely more productive.



### How to Evaluate a Place Management Application

Here are a dozen criteria for the evaluation of a Place Management (PM) Application:

## How to evaluate a Place Management Application

- 1. Is the PM Application a Rich Internet Application?
- 2. Can you define Places on existing web pages?
- 3. Is a page authorized for update by a specific user or users?
- 4. Can multiple users access the same page concurrently?
- 5. Is the Place protected from simultaneous access by different users?
- 6. Are changes to the Place made to a staging area?
- 7. Can you or your staff develop new Place Managers?
- 8. Are the places defined by industry standard tags?
- 9. Can you clone or delete pages?
- 10. Can you deploy the product incrementally?
- 11. Can you preview the page before publishing?
- 12. Is the cost a flat fee regardless of the number of users?

You should be able to answer 'Yes' to all dozen questions when you evaluate a PM Application.

The Bizyweb™ application has been designed to satisfy theses criteria. Please go to www.bizyweb.com for details on obtaining the product.

# Place Management breaks the webmaster monopoly of the website

#### Why Place Management?

Using a Place Management application, a web site page may be seen as a composite of many Places updatable by different users. Pages may be cloned and assigned to users, which spreads the work of managing the content or design elements across the organization. Instead of the unproductive many-to-one model, the organization takes advantage of the many-to-many model.

Place Management is a logical way to break the webmaster monopoly of the site.



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About the author. The author held positions in technology at Motorola, Tandem and 2Bridge, when each company was producing seminal contributions toward the progress of technology and is now the President of Bizy, Inc., the developers of Bizyweb™, a Place Management Application.

For more information about the company Bizy, Inc., please visit the corporate website: www.bizyinc.com

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