



TECHNOLOGY AUDIT

# MySource Matrix

## Squiz

### SUMMARY

#### IMPACT

MySource Matrix is an open-source Web content management (WCM) solution, which can be used to create and publish Websites, intranets, extranets, and portals. It has been designed to allow business users to easily create and publish Web content by separating the content from the presentation layer.

- It will help organizations publish dynamic personalized content that enhances the user experience.
- It will enable medium to large-sized organizations to implement a cost-effective open-source WCM system that is easy to use and benefits from a large community of developers.
- Using MySource Matrix, government bodies will be able to provide online services to citizens.
- MySource Matrix will benefit publishing companies that need to publish high volumes of content.

#### KEY FINDINGS

<b>Strengths:</b>	<ul style="list-style-type: none"><li>✓ Cost-effective open-source solution with a large community of code contributors.</li><li>✓ Supports multiple languages, enabling organizations to produce localized content that adheres to global branding.</li></ul>
<b>Weaknesses:</b>	<ul style="list-style-type: none"><li>✗ Does not include Web analytics, although it will integrate with Web analytics solutions.</li><li>✗ GPL version should only be deployed by organizations with requisite in-house skills.</li></ul>
<b>Key Facts:</b>	<ul style="list-style-type: none"><li>i Can be installed as a software solution or provided as software-as-a-service.</li><li>i Includes Web 2.0 features.</li></ul>



### OVUM VIEW

MySource Matrix is an open-source WCM product that provides a cost-effective platform to create and manage Web content. It benefits from a large community of code contributors that help to extend its capabilities. For many organizations the Website is now the primary method of interacting with potential clients, and there are only a few seconds in which to engage visitors and turn them into customers. It is therefore imperative that organizations are able to create dynamic, timely, relevant, and personalized content that will retain the interest of visitors and keep them returning to the site. MySource Matrix provides multilingual support and localization features to enable organizations to create localized content while retaining global branding. However, the solution does not include Web analytics, which Ovum would like to see added to the product. It is ideal for any mid to large-sized organization that has large volumes of content to publish via the Web. Future plans include improved scalability, advanced integration tools, and an easier-to-use interface. There will also be inline editing, change-tracking to aid collaborative work, and a contextual help system.

### Recommendations

- **Scenario 1:** MySource Matrix should be seriously considered by mid-market organizations that have high-volume publishing requirements and require an easy-to-implement and easy-to-use solution. Industry sectors where this is relevant include government and the public sector, broadcast and media, higher education, charities, and travel firms. The SaaS offering should be considered by small companies that do not have the resources to manage their own software solution.
- **Scenario 2:** MySource Matrix is not suited to organizations that require a built-in Web analytics capability. This could include large enterprises that want to analyze customer behavior, monitor popular and not so frequently visited areas of the Website, and tailor content according to visitor preferences.
- **Scenario 3:** For existing customers Ovum believes that MySource Matrix represents good value for mid to large-sized organizations that have high-volume publishing requirements, where the cost of changing a cost-effective open-source solution to a proprietary licensed offering would outweigh any benefits gained.

## FUNCTIONALITY

### SOLUTION OVERVIEW

MySource Matrix is an open-source content management system that helps organizations to create, edit, manage, and publish Web-based content. It is designed in a way that content authors need little or no knowledge of HTML to create and publish new information to Websites. It includes a WYSIWYG editor to enable users without any HTML knowledge to create, edit, and modify content. By using the editor, users can perform operations such as creating tables, and inserting text, hyperlinks, and images or media content.



MySource Matrix treats as “assets” all the components that make up a Web page, including the page design itself. Examples of assets include folders, pages, images, MS Excel spreadsheets, MS PowerPoint slides, MS Word documents, and PDF files. Assets can also be customized in the sense that an output from a third-party application can be classified as asset-class and can be called into the Web page. Ovum believes this asset-based approach is flexible because it allows the reuse of all types of content in multiple locations, as well as the setting of access privileges at a very granular level, the asset level. Each asset within MySource Matrix has a status associated with it to help, for example, users to clearly distinguish between content that is incomplete and still in the review stage, and content that is complete and has been approved.

There are a number of standard modules that enhance the capabilities of the solution. The Data Module contains an RSS feed aggregator, a DB query tool, a CSV upload tool, and a custom XML Data Source. The Web Services module provides SOAP, JSON SharePoint, TRIM, LDAP/AD, IPB, and Google Maps. Other modules include: Bulk Mail (email and e-newsletter generation), Calendar, E-commerce (includes payment-gateway integrations, shopping cart, and donation), Custom Forms, Tagging (allows implicit and explicit personalization), RSS, Commenting, Rating, Poll, Quiz, Account manager (user sign-up), Reporting, Search, and Trigger.

The search capability was enhanced with the acquisition of the Australian search technology company Funnelback in 2009. Funnelback Search can be easily integrated with MySource Matrix and it can also be used to search external systems.

As an open-source product, MySource Matrix is free of license fees, and Squiz adds value by providing clients with commercial services around MySource Matrix. These are offered through a series of packages of Squiz services, which enable customers to select the level of support they require.

## SOLUTION ANALYSIS

### Architecture

The solution offers support for a number of architecture options including Direct Access, Reverse Proxy, Static Publishing Platform, Dynamic Publishing Platform, and implementation in a clustered environment. The majority of MySource Matrix implementations are on the Direct Access method either on a single server (application and database on the same server) or on a dual server (application and database on dual servers). The most popular n-tiered architecture for MySource Matrix is the Reverse Proxy and this has several advantages over the Direct Access option, the most important of which are performance improvement through caching, and increased security because the publishing servers and authoring servers are separate.

MySource Matrix supports standards including W3C XHTML 1.1 and W3C 4.0 Strict HTML. It also conforms to the Web Content Accessibility Guidelines (WCAG) conformance level A (satisfies priority 1), Double-A (priority 1 and 2), and Triple-A (priority 1, 2, and 3). The level is controlled by the design template, which is dictated by a client’s design requirements.

As an open-source solution MySource Matrix benefits from a large developer community that contributes code to enhance and extend the product. It also provides a cost-effective solution for organizations that do not wish to purchase expensive licenses. Even though the solution can be implemented for no cost, Ovum would always recommend that organizations purchase maintenance and support for an open-source solution.

### Usability

MySource Matrix supports content creation and editing in a collaborative environment. During the process of editing the contents of a page, users have to acquire a lock for an asset, which prevents two people from simultaneously performing an operation on the same asset. There are multiple methods by which the lock can be released. For example, manually releasing the lock, automatically releasing the lock after a period of inactivity, and forcefully releasing the lock by higher-level users such as administrators or super users.

MySource Matrix CMS is also equipped with version-control features, which ensure that the version number is automatically updated when a user makes any changes to an asset. In addition, there is an option of a manual over-ride whereby a new major version can be forced by the user. Version numbers are maintained for every asset in the system, with the format: MajorNo.MinorNo.MicroNo. When users edit a document and save it, the micro version is automatically updated.

An administrative interface provides access to all of the features on the system. For non-technical users there is a "simple edit" interface, which can be customized. Non-technical editors can be given control over any item of text and can specify different contexts for the content, such as managing content across different languages or devices. A complete audit trail is maintained of all changes made to assets, when they were made, and by whom. Complete versioning and rollback are also supported.

### Integration

A number of tools are available within MySource Matrix to facilitate integration with third-party systems. The first is a DB Data Source Asset, which allows users to connect to a local or external database and execute a query. The DB Data Source Asset contains a GUI interface to build simple queries. Another capability that facilitates integration with third-party resources is the RSS Data source asset that allows users to connect any valid RSS feed and treat it as an asset within MySource Matrix. The third type is a Remote Content Asset type that allows users to embed the contents of an external Web page into the design of a page. There are also custom asset types and asset bridges that allow users to interface (proprietary or non-proprietary) with a particular client type.

A caching system is used to manage the performance of high-traffic dynamic Web applications that rely on a high number of Web services calls to generate each page. This is particularly important for sectors that require very short caching times such as financial services and online gaming.

### Workflow

MySource Matrix has a workflow engine to aid in the approval process. Users are able to switch between contexts such as language or device.

The workflow is based on triggers and condition parameters that have to be defined. MySource Matrix automatically generates audit logs when a change is made to any asset within the system. It also provides a log viewer that allows an administrator to look at any logs in the system. The product has an optimized multi-context editing and workflow system that allows users to quickly and easily switch between contexts such as language or device. This functionality can also be integrated with translation-management systems and external workflow steps.

### **Localization**

MySource Matrix supports multiple languages to enable organizations to produce localized content that adheres to global branding. To help to simplify the translation process, the workflow can include steps to send content outside of the organization for translation. Its multi-context editing and workflow system also allows users to easily and speedily switch between contexts. A context can be a language, and this allows organizations to manage their global Web assets without affecting the ability of local regions to react to their particular market dynamics.

### **Web 2.0**

MySource Matrix includes Web 2.0 features including the ability to create blogs and wikis. There is an RSS reader, which allows out-of-the-box integration with popular blogging sites such as Twitter and Blogger. Blogs can also be set up within MySource Matrix. Outbound RSS feeds can be created, and the licensed version is able to read RSS feeds from external sources with the ability to determine how the feed is displayed by using the asset-listing tool. Customized forms can be used to build surveys into the system including check boxes and drop-down lists. User-feedback forms are also supported, and the data, which is stored in the repository, can be sent via email to a designated person. A custom-form template is included that allows users to create Web forms using a point-and-click interface. All forms and data can be extracted into an XML or CSV format. In addition, there are polling capabilities, support for forums, and members-only areas. Tools are included that allow content to be embedded from other sites or systems to create mashups. For example, Remote Content allows other Web-enabled systems to be seamlessly displayed within the system, and the Google Maps module allows maps to be embedded in the content.

## **PRODUCT STRATEGY**

The target market for MySource Matrix is organizations with high-volume publishing requirements, such as publishing companies, higher-education establishments, government bodies, charities, and travel firms. Geographical target areas are Australasia, EMEA, and North America. In terms of company size, Squiz targets organizations with 50-plus staff that have at least 100 articles a month to be published. It is Ovum's view that Squiz has chosen its target markets well. Demand from publishing companies for highly scalable WCM systems will increase as the demand for online content increases in line with a decrease in the take-up of printed content, in particular newspapers. However, the move to more pay-to-view content could slow this process. Similarly, government and public-sector bodies are increasing the amount of information they provide to citizens via the Web, and are introducing new online services to enable citizens to perform functions such as paying bills.

Squiz sees a major opportunity coming from the increased adoption of supported open-source solutions in the enterprise, with some enterprises realizing that commercial open-source products such as MySource Matrix can provide comparable or better functionality than traditional licensed products without the need for expensive license fees. According to Squiz, the provision of 24x7 support has resulted in an increased presence in companies with global brands. The addition of content search will also offer the company additional opportunities.

The solution is sold directly and through agency partners that supply complementary services to MySource Matrix. Squiz has business partnerships with Fujitsu, The Grand Union, and Eduserve. Key technology partnerships include Zend, Dell, HP, The Bunker, and Macquarie Telecom.

There are two licensing structures available for organizations looking to implement MySource Matrix. The first is an unsupported open-source General Public License (GPL) version and the second is a paid-for licensed SSV. The code and base functionality of the two versions are identical. The SSV version includes a bundled package of Squiz support services and some additional add-on modules. There is also a software-as-a-service (SaaS) offering.

The average project cost for the implementation of Squiz MySource Matrix is between £50,000 and £100,000. This includes the cost of licensing SSV and engaging the company's professional services team. Squiz claims that the range of overall project costs can vary anywhere between £0 and £150,000.

Squiz has a major release once every four to five months. Minor releases with urgent bug fixes are produced as necessary, and according to Squiz can generally be turned around within a week or two of a request being made. Clients can choose to upgrade to a minor release or wait until the fix is incorporated into the next major release.

In excess of 1,200 customers are reported to be using MySource Matrix, including the Australian Federal Government, EMAP, Hargreaves Lansdown, the University of Oxford, the Royal College of Nursing, the NHS, the Victoria and Albert Museum, and the University of Brighton.

## **IMPLEMENTATION**

Through a project-implementation roadmap, Squiz offers clients the tools and services to customize MySource Matrix to better suit their business requirements. Projects are phased and consist of the pre-implementation period, the implementation period (12 weeks), and the post-implementation phase. The pre-implementation phase involves members from the end-user organization and Squiz working together to develop a strategy roadmap that outlines the goals of the project. This is followed by the implementation phase that Squiz divides into five concurrent streams of work: project management, design, implementation, hosting, and training. This phase does not involve the addition of new functionality or software-development work. The final phase is the post-implementation phase, which focuses on equipping the end-user organization with the relevant knowledge and experience required to maintain MySource Matrix.

Once MySource Matrix has been implemented, the company offers a number of post-implementation services in the form of SLA packages. These include application warranty, upgrades, platform maintenance, helpdesk, 24x7 support, uptime guarantee, back-up, remote access, and response-time guarantee. Customers can choose to provide all these services themselves or they can engage a third party.

Squiz provides Web-based, classroom, and onsite training for customers of MySource Matrix. Once MySource Matrix has been implemented, there are a number of technical-support options. Ad hoc support is available, which is based on prepaid support packs. The Standard SLA provides support during working hours in the local time zone, with a 30-minute response time guarantee, dependent on incident severity and business impact. A 24/7 Global SLA offers 24x7 global coverage with response times the same as the Standard SLA.

The solution is supported on Linux and Unix platforms. It also offers support for Solaris, HP-UX, BSD, and OSX environments. The other third-party resources that MySource Matrix is dependent on are Oracle/Postgre SQL database, PHP 5.x, and Apache Web server.

**Deployment Examples**

**Clearswift:** Clearswift is a software vendor with a global customer base that provides Internet-content-filtering solutions. It implemented MySource Matrix in 2009 to coincide with a rebranding exercise and a desire to develop more opportunities to engage via the Web with its partner network. Following the implementation Clearswift provides content to partners and customers in English, German, and Japanese, and claims that its new Website offers quick and easy access to information about its products and services, providing opportunities for greater customer engagement and stronger sales performance.

**Westminster Abbey:** Westminster Abbey implemented MySource Matrix to replace a system where Website updates were managed by an external company, which was unsustainable because the Abbey's content changes on a daily basis. By taking control of its Website, Westminster Abbey has been able to interact online directly with its visitors, resulting in a 30% increase in visits with a rise in repeat visits. Content includes an updated set of archives, a news section, and an online shop, alongside a new events calendar, social-bookmarking buttons, foreign-language sections for overseas visitors, a Twitter plugin, and regular podcasts.

**University of Westminster:** The University of Westminster deployed MySource Matrix as a platform on which to develop content for its Website when it outgrew the proprietary system it had been using. Once the technical platform had been implemented, the core Westminster developer, editorial, and administration teams were trained by Squiz, which gave them the ability to handle content migration and create much of the new site architecture themselves. The project was completed from commissioning to live in eight weeks. The live site is managed and hosted in Squiz's data center and is fully managed via an enterprise-level SLA to handle day-to-day support issues and application tuning. According to the university, benefits of the deployment include ease of use, integration with a diverse range of systems, and the ability to scale in terms of the number of editors, the amount of content served, and high traffic loads in peak periods.

Table 1: Contact Details	
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