



# CONTENT MANAGEMENT DRIVES KEY BUSINESS INITIATIVES

It's all too easy for companies to slip into the mire and confusion of too many uncoordinated Web initiatives. It takes resolve, courage, and some clear-headed decision making to avoid, or recover from these mistakes. Many companies—including Avnet Incorporated, one of the world's largest distributors of semiconductors and computer equipment—have found that the path back to an effective Enterprise Web can quickly energize their business.

Serving customers in 63 countries, in 2003 Avnet was ranked #206 of the Fortune 500 and was also named to Fortune's list of Top 50 Fastest Growing Companies in 2002. Avnet Computer Marketing (CM), one of Avnet Inc.'s major operating groups, was faced with the daunting challenge of managing more than 50 unique sites under its umbrella. The Avnet CM situation was not unlike that of many companies reeling after years of Web fever. Avnet CM's IT staff was spending most of its time maintaining, managing and overhauling its existing, handcrafted Web sites instead of working on valuable projects to address business and customer needs.

According to David Stuttard, Avnet CM Vice President of Application Solutions, "Business content owners would come up with an idea and pass it on to a developer. The developer would lay down the HTML and publish the site, and any modifications would come back through the developer in the form of one-time projects. This created bottlenecks and delays that were compounded through our need to refresh each site and its content regularly."

Obviously, Avnet CM needed a strategy change to better handle the management and delivery of content to its customers.

## DEFINING THE ENTERPRISE WEB

Just like at Avnet, every day there are people throughout your own company building your enterprise Web—but most don't

even realize the independent part they play in defining the final outcome. And, while workgroups, departments and even individuals will champion much of the content and many of the applications in your company's Web presence, you are ultimately responsible for its overall success.

There are some simple ways to judge the success of your Enterprise Web initiatives (see "Judging Success"). As a senior IT leader in your company, you should be guiding the company, providing specific technology direction and tools, and ensuring that the efforts of all business groups are harmonious, coordinated and leveraged. You need to have a plan in place to keep your company moving forward together.

The Enterprise Web directly plays into a number of strategic business initiatives:

- Brand identity
- Employee productivity
- Decision support
- Customer service
- Supplier and channel partnerships
- Government and industry compliance
- Centralized control of assets and processes
- Cost reductions and process optimization

Given the broad company impact of the Enterprise Web, senior IT managers should work closely with other leaders in the company to choose the best strategic direction. Invariably, senior management will define specific initiatives that must be addressed company-wide. These often include ensuring consistent brand identity across all customer interactions, enforcing regulatory compliance such as auditing and archiving where necessary, and providing cost savings and reduced risk across projects.

In addition, you can expect business leaders to champion a wide range of applications necessary to support ongoing busi-

ness operations and strategic business initiatives, including:

- Employee services, including online benefits programs and help desks
- Sales support
- Executive dashboards
- Partner and channel support
- Self-service customer care
- Research publishing
- Policy and process documentation
- Process and manufacturing control

These applications may take many forms, but all share a place in the Enterprise Web. Each should leverage the choices and decisions you have made. Make no mistake—the Enterprise Web is one of your most important strategic assets and a profound way for IT to influence the top and bottom line of business.

## THE CONFUSING TECHNOLOGY LANDSCAPE

How do you choose the technologies and vendors that fit with your strategy? Avnet's experience is not uncommon: "We had a list of about 20 features, some of which were more important than others," Stuttard explains. "Some vendors had six or eight, some had only two or three of those features."

What Avnet needed overall was the ability to integrate content management with content delivery and presentation. Indeed, to fulfill business objectives, most companies need a complete solution that integrates right out of the box. It may be tempting to take a piecemeal, tactical approach and attempt to match individual project requirements to specific product offerings, but the reality is that you have multiple projects now and many more to come with as-yet-undefined requirements. While for a given project, one particular product may match well, over time this strategy will lead to a mismatched hodgepodge of different products with little opportunity to leverage learning and investment. And it could result in costly consequences. This approach leads to failure at the enterprise level.

To be successful, IT managers must take an enterprise-wide view and map out the common threads across multiple projects. This will lead to a set of common and closely related needs around portal delivery, collaboration, content management, workflow, search, application integration and security. Most companies would agree on these core services but find it confusing to decide where to go next.

This confusion stems mostly from the availability of what has been an immature set of partial offerings from a variety of software companies. Given the range of vendors offering narrow point solutions around portal, content management or collaboration applications, customers often ask the question, "What software should form the foundation of my Enterprise Web?" Customers were often led, or mislead, to choose one of these packages as their primary platform. This approach invariably leads to frustration, unnecessary complexity and additional costs as customers go through unnatural acts to integrate the other capabilities they ultimately need to build the right business solution.

The reality is that all of these capabilities are important to an adaptable and fully functioning Enterprise Web. What customers really need, they soon realize, is a solution that integrates them all. Experienced buyers know that standards alone do not ensure interoperability and that integrating products from multiple vendors can often be costly and lead to project delays or failures. Inter-vendor finger-pointing can run rampant and thrust the lead managers into unexpected and complicated project manager roles. Companies need to focus on their own business issues, rather than play the intermediary between vendors trying to work together.

While some niche content management companies will claim expertise as a portal vendor and some portal-focused vendors will claim to offer content management functionality, their secondary offerings are typically shallow sets of features and function. Some vendors treat content management, portal delivery and collaboration as checklist items. In reality, each product category involves a full range of rich functionality necessary for successful deployments. Businesses must look closely at the depth of the offerings available to make a good decision.

## A CONTENT MANAGEMENT PERSPECTIVE

There are many factors to consider before choosing a content management solution and the partner who can best deliver that solution. To meet business needs, the content management package you choose must first provide a cost-effective, standards-based, scalable solution for creating and managing content for your many Web sites, portals and other online and offline properties. The content management solution should also be quickly configurable to meet your organization's

### JUDGING SUCCESS

*With a solid Enterprise Web business strategy, companies can measure the benefits of convergence across multiple application initiatives.*

**Compressed implementation cycles.** Follow-on projects will have unique requirements, but can leverage proven project management processes and techniques to decrease project time.

**Lower incremental project costs.** Follow-on projects will have unique requirements but will leverage proven infrastructure, processes and assets to decrease project costs.

**Reuse of services and content components.** Successful services and content will naturally be reused in follow-on projects so new audiences can benefit.

**Higher-quality content.** Content will improve due to structured workflows that ensure quality and due to lessons learned around successful content. In the past, these lessons were often hidden within workgroups, departments or certain individuals.

demanding and changing needs. Adhering to these criteria will help your organization save time, reduce cost and risk, and reliably deliver mission-critical content to customers, employees, suppliers and partners.

Content management plays a key role in the Enterprise Web, and is often used in conjunction with portal or collaboration services. As such, content management service should serve as the primary content creation and management application, while portal and collaboration services provide different ways to deliver and consume the content. To achieve this goal, content management must be closely integrated with portal delivery and collaboration services.

## MAPPING SOLUTIONS TO REAL BUSINESS NEEDS

Ideally, your content management solution should address the following areas in order to help your business manage costs, risk, change and assets (see “Key Business Factors”):

### 1. CUSTOMIZABLE SOLUTION

To meet your company’s needs around project size and application requirements, your content management solution partner should offer a flexible choice of products and suites—from standalone products for small deployments, all the way to enterprise suites for multiple project deployments. That way, you can choose to purchase only the software you need, knowing you can successfully integrate other products and suites later as needed.

### 2. COMPRESSED IMPLEMENTATION CYCLES

Software is only part of the total cost of a solution. Another major factor—cost of implementation—is an extremely important consideration in today’s challenging economic climate. Ideally, the content management solution you choose should include a pre-built reference implementation so workgroups, departments, or enterprises can start with a working system and augment it to meet their needs. The result is faster and less costly implementations that increase business momentum and reduce overall project risk. It’s not enough to have an eventually positive ROI—companies also need a rapid ROI to justify business value. The solution needs to address the “blank slate” syndrome with a complete set of

applications, workflows, templates, sample content types and examples that work right out of the box.

Your content management partner should be familiar with the major vertical industries, so they can help your company address industry-specific challenges with proven assets and approaches. Rather than simply selling frameworks and broad, undefined capabilities, the partner’s goal should be to deliver real working examples to accelerate results, so your company can achieve business value more quickly and confidently.

### 3. EVOLVED INTERFACES FOR BUSINESS AND TECHNICAL USERS

Business users have different content management needs than technical users. The chosen content management solution should include applications designed for the unique roles and requirements of different users. This allows companies to manage costs and manage change more effectively and efficiently, and will lead to a lower total cost of ownership companywide.

For example, a product specification might have pre-defined sections for release date, system requirements, picture, and short description. Each of these sections must be managed separately so the right people are involved with the right parts of the document. Finally, business users should be able to publish documents to Web sites, portals, or other Web applications without the aid of the IT group. This saves time and relieves the IT staff from becoming a bottleneck in the process.

To streamline business processes, the solution should allow both IT administrators and business content managers to register, categorize and initiate workflows around content. By having a single interface, content can be managed in one place regardless of its source. The interface should be able to adapt to varying business requirements without constraints imposed by other proprietary systems. It should also use easily modifiable, open-standards-based templates and include tools that developers can use to customize the interfaces for specific business needs.

### 4. BUILT-IN SUPPORT FOR REALISTIC DEPLOYMENT SCENARIOS

Your content management solution should integrate seamlessly with deployment and delivery across Web sites, portals, and

	MANAGE COSTS	MANAGE RISK	MANAGE CHANGE	MANAGE ASSETS
1. Customizable solution	■	■	■	
2. Compressed implementation cycles	■	■	■	
3. Evolved interfaces for business and technical users	■			■
4. Built-in support for realistic deployment scenarios	■		■	■
5. Virtual content repository for broad reach	■	■	■	■
6. Workflow management of content lifecycle	■	■	■	■
7. Library services for process enforcement and compliance	■	■		
8. Integrated, scalable and standards-based solution	■	■	■	

Web applications. It should also address the unique differences between application code and content in the development, test, staging and production environments. These considerations reduce the difficulties and costs inherent with other content management systems.

For content, deployment and delivery should simply be another step in the content management and workflow cycle that does not necessitate any intervention by your IT staff. Companies should be able to define delivery endpoints for each of its target audiences. These channels may be tied to portals, wireless devices, or other Web sites and applications. Changes in content should initiate automatic updates to these independent endpoints.

The inherent differences between application code and content across the development, testing, staging and deployment environments should be addressed. Your staff should be able to test application code apart from content, debug it in the development and test environments, and then combine it with content in the staging environment before final deployment to production. You should also have the ability to modify and deploy application code without affecting the current content.

## 5. VIRTUAL REPOSITORY WITH BROAD REACH

Most corporations have a combination of structured, semi-structured, and unstructured content spread throughout various systems in the enterprise. Some document management system vendors force all of this data into a central repository. This approach is expensive, cumbersome and unrealistic. It's far better to let the content live in its natural setting and connect to it, in real-time, when needed. This approach allows companies to manage assets better, account for real-time changes to these assets, and to adhere to the proven adage of "one version of the truth."

Your chosen content management solution should connect to the content source in real-time, creating a virtual repository of content. It should also support the virtual repository model with a number of features and capabilities. Key among features is a set of integration adapters to each of the many information sources. These include databases, file systems, e-mail servers, messaging architectures and enterprise resource planning (ERP) applications.

## 6. WORKFLOW TO MANAGE THE CONTENT LIFECYCLE

Businesses often publish embarrassingly incorrect or outdated content on their portals or Web sites. These gaffes have a dramatic negative effect on the company's brand reputation, and can significantly influence customers' confidence. With a properly chosen and deployed content management system, any company can more confidently increase brand value and meet customer expectations while managing costs, increasing efficiencies, streamlining processes and producing consistent content.

Customers, suppliers, partners and employees have high expectations in a company's published content. What's need-

ed is a powerful workflow service with simple-to-use, basic workflows that can be extended for any business process. Workflow ensures that companies can manage their content effectively and manage ongoing change within this content. Without workflow, companies lose control of their content.

Content exists within a business context and has a definite lifecycle. Workflow control serves to manage this context and lifecycle, and can help eliminate content errors, ensure content currency, and increase the efficiency of content creation.

Workflow services also ensure that content can be checked, approved, re-approved when modified, or expired periodically. Workflow also provides the leverage companies need to ensure consistent quality throughout their content offerings. Finally, workflow eliminates a lot of redundant, out-of-band communication about the need for individual or department involvement with some piece of content. Workflow ensures the document is automatically routed for comment or correction.

## 7. LIBRARY SERVICES FOR PROCESS ENFORCEMENT AND COMPLIANCE

Unique corporate processes, evolving industry standards and amended government regulations can necessitate a structured approach to content creation, management and delivery. Library services such as version control, rollback, content history and auditing reports help companies meet these requirements. In addition, the solution you choose should enforce workflows to ensure that specific individuals or departments (the legal department, for instance) approve content before it is published. This allows you to manage risk and change, knowing that key internal requirements are being met.

During audits, industry reviews or legal cases, companies are often asked to recreate the published content available as of a certain date or to illustrate the process that led to the creation of a given piece of content. With library services, companies can recreate these past views and processes. This

### KEY BUSINESS FACTORS

Managing key business factors ensures the success of the Enterprise Web.

**Manage costs.** Companies need to manage TCO including software, service, training, operations and ongoing maintenance costs.

**Manage risk.** Companies must manage and mitigate the risk for current projects by clearly identifying business objectives, compressing timeframes, reusing proven success scenarios and choosing experienced project participants.

**Manage change.** Companies must plan for future disruptions and opportunities and create adaptable processes, assets and architectures.

**Manage assets.** Companies must leverage digital assets and deliver appropriate content effectively to employees, partners, customers and suppliers.

can save a business thousands or even millions of dollars compared to the daunting task of piecing together old documents from numerous sources and different systems throughout the company.

The same library services that can save you during difficult compliance audits can also support you in day-to-day operations. Project teams can recreate edit trails around a piece of content in order to reverse paths quickly and easily, often saving hours or days of work.

## 8. INTEGRATED, SCALABLE, STANDARDS-BASED SOLUTIONS

Companies must reduce risk by choosing software and solutions that will work for them well into the future. Products must be scalable and adhere to industry standards so that future needs can be met. Further, forward-thinking corporations want their components to have rich, proven integration rather than just shallow coexistence. This rich integration ensures lower costs and higher productivity.

A well-chosen content management solution should embrace a wide variety of standard Web, application, database and directory server technologies in order to integrate well with your existing infrastructure. Some of these widely used standards include J2EE, .NET, XML and Web Services.

Secure user access should be centrally managed through delegated administration practices based on the LDAP directory standards. You should be able to create, assign, manage and revoke the specific roles of users or user groups within the organization. This is especially important for companies working in highly controlled industries with strict privacy regulations.

## THE RIGHT BUSINESS SOLUTION

Content management is a core component of an effective Enterprise Web. With its complete, integrated solution including portals, content management and collaboration, Vignette content management solutions help companies power their Enterprise Web while remaining focused on the success of their business. Vignette is the only company that offers a complete solution aimed squarely at satisfying its customer in every functional area to manage costs, risk, change and assets.

Vignette has more than 1,600 customers in the financial services, life sciences, high tech, manufacturing, government, publishing, telco, retail and travel industries. These customer experiences have led to a clear understanding of common business problems and provided a number of breakthroughs to address specific industry challenges.

## INTEGRATED SOLUTION

Customers choosing Vignette as their strategic partner benefit from a number of technology acquisitions that the company has made over the last several years. Vignette has leveraged its leadership position and standards-based philosophy to consolidate carefully selected, best-of-breed point solutions. Vignette has invested further to integrate each into a cohesive and comprehensive product line. This solution set offers real advantages

for customer companies that are more interested in solving business problems than they are in working through vendor-to-vendor integration issues.

Avnet CM leveraged Vignette's integration capabilities to help rebuild its more than 50 globally branded Web sites to make a stronger impact on customers. Says Avnet's Stuttard, "Vignette has enabled us to integrate all of our different technologies—within a consistent framework—so the customer always has the same experience anywhere on the site. We've seen a quadrupling in our number of users since we've launched."

José Manuel Martínez, manager of Third Party Content at Vodafone Spain, puts a different spin on the integration benefit. For its "Vodafone Live!" initiative, Vignette was chosen to manage and deliver the content from more than 170 national and international value-added content providers. "For us Vignette is not only a WAP or Web publication platform, but also the tool we use to manage all the content that we deliver to our clients via various channels."

In addition to offering applications, templates, and workflows to accelerate projects, Vignette brings the know-how that only comes from experience in your industry. The result is a faster return on investment that ensures business momentum.

Vignette has emerged with the right set of software to build the Enterprise Web. Its robust platform results from Vignette's historical strength in content management and content-centric applications, as well as smart technology additions made through the acquisitions of DataSage, OnDisplay, Epicentric, Revenio and Intraspect (note that Intraspect Software acquisition was not finalized as of this writing). The result is one single platform built upon J2EE, XML, and Web Services standards, allowing customers to choose the right components now and easily integrate other components later.

Through its suite of application services (including portal, content and collaboration services) built on a standards-based services architecture, customers can choose just the right set of software and technologies for rapid deployment of workgroup, departmental and enterprise initiatives. With this set of tools, the business problem—not the technology challenges—drives the solution.

Vignette has grown and evolved over the last seven years and earned its place as a company that can address all facets of content management, content delivery and collaboration to help you build your Enterprise Web. ■

To find out how Vignette content management solutions can help your organization meet key Enterprise Web-driven business objectives, join us on November 20 for a live, interactive e-seminar. To register, visit [www.webseminarslive.com](http://www.webseminarslive.com) today.