



white paper

The Siren Song of Open Source CMS: Should You Listen?

agencyQ Chooses Sitecore to Deliver Enterprise-Class Capabilities and Performance, Low TCO and Immeasurable Peace of Mind



Table of Contents

Open Source: Low-Cost Software with High ICO	1
Open source CMS applications: Significant hidden costs	1
Open source TCO spirals out of control	1
Myth #1: Open Source Applications' Scalability	
and Capabilities Are as Good as Commercial Software	2
"A mile wide and an inch deep"	2
Crossing the line into application development	2
Scalability has multiple facets	3
Open source applications' murky upgrade path	3
The real-world impact of open source	4
Why agencyQ chose Sitecore	4
Myth #2: Open Source Is Well-supported by a Community of Developers	4
"One throat to choke"	5
Why agencyQ chose Sitecore	5
Myth #3: Open Source Is Cheaper than Commercial Software	6
The slippery slope of open source	6
Why agencyQ chose Sitecore	6
Summary	7
About agencyQ	8
About Sitecore	8

Copyright

Copyright © 2011 Sitecore. All Rights Reserved.

Restricted Rights Legend

This document may not, in whole or in part, be photocopied, reproduced, translated, or reduced to any electronic medium or machine readable form without prior consent, in writing, from Sitecore. Information in this document is subject to change without notice and does not represent a commitment on the part of Sitecore.

Trademarks

Sitecore is a registered trademark of Sitecore. All other company and product names are trademarks of their respective owners.



Open Source: Low-Cost Software with High TCO

Over the past 25 years, open source software has evolved from the fringes of high tech society into the mainstream. The "siren song" of open source is a powerful one, promising to eliminate software licensing costs and give entrée to a passionate, global development community. But should enterprise IT organizations heed it? Or, as in Greek mythology, do those who are tempted by the siren song of open source suffer tragic consequences?

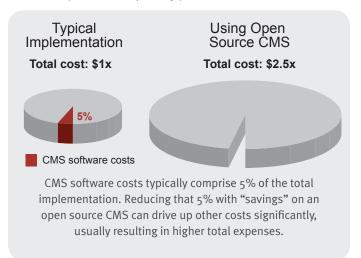
Open source CMS applications: Significant hidden costs

Sean Breen, founder and CEO of agencyQ, a digital marketing agency headquartered in Washington, DC, sums up his firm's experience with open source software CMS: "We are a client service organization, and, the success of our clients reflects on us. After we're done with a project, we still have a relationship with our clients and need to support them. As a service provider looking for support for critical applications, I don't want to depend on the equivalent of begging in the street for answers – that is what support is like with an open source content management system [CMS]. I want to know that I'll get a real person, whose job is on the line, to help me. That was our tipping point; that's why agencyQ decided to switch to a commercial CMS like Sitecore."

After making a concerted effort to work with an open source CMS, non-existent support was the last straw with what Breen found to be open source's extremely expensive total cost of ownership (TCO). In website development projects, CMS software costs typically comprise 5% of the total implementation costs. "But by saving 5% in software costs by choosing an open source CMS, you drive up the 95% of the 'other' costs

significantly. That's not a good value equation, by any measure," he says.

Specifically, "too often the temptation is to focus on the cost of the software. In the real world, that software cost is almost always the least significant portion of TCO," Breen continues. "Implementation, support, maintenance, organizational acceptance and adoption costs are almost always higher. This gets to the heart of the problems we have seen with open source CMSes: poor documentation, minimal or nonexistent support organizations behind them, no cohesive training and user adoption programs."



Open source TCO spirals out of control

A CMS is a major application that, like any core enterprise application, is not easily swapped out after it has been implemented. While this reality rings true with commercial applications like Sitecore, it is greatly magnified with an open source CMS, which inevitably contains much more custom code. As a result, an open source CMS implementation involves less configuration than it does customization, which makes it expensive to change later.

Most organizations forecast the total lifecycle of the CMS as three to five years – a significant amount of time when calculating TCO, particularly with an open source CMS.



Against a backdrop of the three mythical benefits commonly associated with open source software, this white paper describes agencyQ's experiences with an open source CMS, and why Breen firmly believes that Sitecore provides a superior CMS solution for the firm's enterprise-class clients.

Myth #1: Open Source Applications' Scalability and Capabilities Are as Good as Commercial Software

Breen says that like many other technology sophisticates, he and others in his firm were initially drawn to open source software by its malleability. "We originally started working with open source platforms mostly because of what we perceived to be the technical flexibility," he says. "We're a pretty technology-savvy company, and the ability to look at the code, make changes to it and diagnose problems, was attractive to us at a fundamental level. Certainly the

"The sheer unpredictability of open source is a killer for budgets, timelines and client satisfaction."

financial aspect – that open source is no cost or very low cost – was appealing as well. But our ability to work directly with the code was the most compelling reason.

"That is the siren song of open source. The thing that's really powerful about it – the software's flexibility – makes it really dangerous," Breen continues. "People take an open source package and modify a couple of pieces without carefully thinking about it. That makes it unsupportable, not upgrade-safe, and carries major performance implications."

"A mile wide and an inch deep"

As it happened, after several successful experiences using WordPress (an open blogging platform) and Drupal (an open source CMS application) in small-scale deployments, agencyQ experimented with using Drupal for larger, enterprise-caliber sites. It seemed to be a good choice, since the Drupal organization touts, as many open source providers do, its offerings to be "free, flexible, robust and constantly being improved by hundreds of thousands of passionate people from all over the world."

agencyQ's experience with Drupal in enterprise environments was not positive. "We quickly discovered that Drupal's capabilities were a mile wide and an inch deep," he says. "The minute you go beyond exactly what open source can do out of the box, it gets very complex very quickly."

Crossing the line into application development

The extensive coding required to accomplish even routine tasks with Drupal produced a seismic shift in Breen's implementation process. "With a commercial CMS, you are essentially *configuring* the product's core, out-of-the-box functionality. This is a pretty fast and straightforward process," he says. "In contrast, with an open source CMS, we found

With Drupal, "you cease being a solution developer and become an application developer."

ourselves *customizing* everything because the functionality was so bare-bones."



Breen provides an example: "Let's look at something basic like a page editor. Both a commercial and an open source CMS solution will have some variation of a page editor. But the commercial version will generally be easier and more straightforward, because you're not building it out or doing customization. It doesn't make sense to customize baseline functionality like a page editor – or, if you do, you'll have to plan how the CMS will need to change, and think about how to build flexible code. At that point, you cease being a solution developer and become an application developer."

Conversely, the Drupal CMS has little to no capabilities for business users. "If you want business user-friendly functionality like content personalization, analytics and AB testing, you've got to build it yourself," Breen says.

Unfortunately, Breen discovered that modifying open source code also carries significant downstream costs. The more code an organization writes, the more it owns, and the more it must maintain. "If you didn't plan your system to exacting detail, you actually lose flexibility and the ability to make changes without starting over or doing a major rework to the CMS," Breen says.

Scalability has multiple facets

Scalability is another key requirement for any enterprise application, including a web content management system. Unfortunately, "the way that Drupal's underlying technology is built, basically with nodes calling other nodes, if you don't take great care in implementing it, you can run into significant technological performance problems.

"Half of the Drupal installations we see are bad because the software is not forgiving; it doesn't protect you from making mistakes or help you do things correctly."

"I've seen this 'in the wild,' that is, in real world development shops — it's relatively easy to make big mistakes in implementing Drupal," he continues. "Half of the Drupal installations we see are bad because the software is not forgiving; it doesn't protect you from making mistakes or help you do things correctly. You can get an installation up and running fairly quickly, but down the road, there will be a huge price to pay."

Specifically, "that's one of the things that pushed us to Sitecore on the Microsoft .NET platform. When it comes to the vast majority of our clients, having an enterprise platform, and an enterprise architecture that is thoroughly and clearly scalable, is important. 'Clear' means that A) the path to scalability is very apparent and easy to understand and B) there are lots and lots of people in the workforce who know how to scale the platform. Sitecore and the .NET platform fulfilled those requirements, as well as offering us tremendous flexibility in customizing the software."

Open source applications' murky upgrade path

In comparison, customizing open source software is, as Breen says, "the kiss of death" because doing so ratchets up the system's complexity and total cost of ownership. "If you are dependent on whoever customized that code for the upgrade path – including yourself – then, generally speaking, you have closed off your opportunity to upgrade the system without investing as much, or more time, in modifying the system to render it upgradeable." Furthermore, Breen says, "a lot of times, open source upgrades are released when their creator feels like it. They usually don't have a clearly articulated roadmap, since the software is community driven. It's an organic process."

The bottom line? "If you go down the open source road, you'd better know exactly what you're doing."



The real-world impact of open source

In terms of the financial bottom line, Breen has vivid recollections of the ballooning costs that open source software can drive. For example, a new client came to agencyQ with a request to upgrade their Drupal CMS implementation, which the client's IT organization had substantially modified. After running Drupal for two years, they wanted agencyQ to do additional customization. But "because of the Drupal modifications the client made and the way they were done," Breen says, "the modification was three times more expensive than it should've been. This project should've cost \$15,000, and it ended up costing the client \$55,000." agencyQ built a shim (an application compatibility workaround) to the client's current Drupal CMS instead of reworking the source code, an approach that was the most expeditious and least costly.

Although agencyQ was able to step into a chaotic client situation and devise a solution, Breen says his agency has been burned by open source, as well. "We've missed deadlines due to open source' poor documentation and lack of a support organization. This can grind implementation schedules to a halt. The sheer unpredictability of open source is a killer for budgets, timelines and client satisfaction."

Why agencyQ chose Sitecore

Having become disenchanted with open source on technical merits alone, Breen and his team selected Sitecore as its main CMS for enterprise-class deployments. "Quite simply, we found Sitecore to be the best implementation of a CMS on the Microsoft .NET platform," he says. "It is cleanly built in such a fashion as to make great use of all the modern features of .NET.

"We want to minimize our risk profile and potential liability on any project. Having a CMS like Sitecore is paramount for us."

We found a number of other commercial CMSes on the .NET platform that are kludgy, containing vestigial Visual Basic code or other old code, which makes implementing and supporting those CMSes very tricky."

Sitecore suits agencyQ's needs for performance and reliability, because "we want to minimize our risk profile and potential liability on any project. Having a CMS like Sitecore that is high quality, has tons of features and ultimately, is highly supportable, is paramount for us."

That Sitecore is an established, stable company also inspires confidence in Breen in the longevity of Sitecore applications. "The commercial world can demonstrate how much time and resources are going into R&D, and can articulate a strong upgrade path. Sitecore has broken out how much money and how many people are dedicated to R&D. It is clear to me that Sitecore is spending appropriate time and energy in R&D to lay out a demonstrable, clear upgrade path."

Myth #2: Open Source Is Well-supported by a Community of Developers

Most open source application providers point to their vibrant community of developers as an excellent resource for enhancements, bug fixes and everyday support. However, as agencyQ discovered, this development model has no accountability. As a result, companies that use open source applications assume significant liability, whether they know it or not. This is particularly risky for digital marketing firms like agencyQ that are building core technology, like a CMS, into the solutions they deliver to customers.



"Lack of support has a ripple effect across an open source CMS project," Breen says. "Because you are starting with a blank slate, in terms of your system's functionality, anything can happen. And when issues arise, the absence of responsive support means that deadlines slip. As a service-driven agency, that is simply not good for business."

Companies that use open source applications assume significant liability, whether they know it or not.

When clients take development into their own hands, as one of agencyQ's did by implementing a website based on Drupal CMS, Breen says that "once companies modify their systems and the upgrades can't be 'automagically' applied, they stop upgrading them because it is too much work, or they don't have the ability troubleshoot why the upgrade won't work."

This opens the door to another host of issues. First, companies don't get the benefits of changes in the technology over time, which can mean they are not supporting current Internet standards. Equally important, these companies make themselves vulnerable to security breaches. When open source upgrades are released to address new security concerns, if a company is unable to quickly install the updates because of extensive customization, they open themselves to major security risks.

"One throat to choke"

It all comes down to accountability, about which Breen jokes, "In high tech there's an old saying that salespeople invoke when they want to be your sole-source provider: 'You want one throat to choke.' While that's pretty graphic, it gets to the point: When something's not working with software, I need one number to call, one person to speak to who's going to help me.

"I do use open source software and I think it has a lot of very practical uses," he adds, "but when it comes down to running a business, you don't want to post to a forum and hope someone gives you some information that may or not be useful. You want a name, a face and a cell phone number for someone who's going be there when you need them. My ability to deliver for my clients matters most; knowing that someone will be there for me is supremely comforting."

Why agencyQ chose Sitecore

Sitecore's ability to deliver responsive, comprehensive support was a critical factor in Breen's decision to choosing Sitecore CMS. As agencyQ has implemented Sitecore CMS as a cornerstone of multiple enterprise web projects, he has received the caliber of support his business needs. "What makes me comfortable about putting Sitecore in front of my clients is that I have five people at Sitecore who I know would respond to me at two in the morning," Breen says. "That speaks very well to Sitecore's faith in their own product and the company's customer-friendliness."

Not that he has frequent occasion to place emergency calls at 2 a.m. Breen finds Sitecore's support organization responsive, and able to solve nearly all issues that arise. "Sitecore has tiered support, and it's pretty easy to get to the top. We had a client who had an issue, and within an hour I was emailing back and forth with the director of support."

"I have five people at Sitecore who I know would respond to me at two in the morning."



Overall, Breen feels that Sitecore has the right support technology and escalation procedures in place. "I'm a veteran of the high tech industry and I've dealt with many support organizations. Sitecore has a very good ticketing system, and releases patches on a frequent, predictable basis."

Breen also cites Dreamcore, Sitecore's regional customer conference, as an invaluable resource for the global Sitecore community. "Dreamcore is great way to learn a lot about what other people are doing. In the open source world, when you download something from an anonymous website, you're taking it on faith that you're going to get any level of commitment. Dreamcore is another important way that Sitecore shows its commitment to its customers."

Myth #3: Open Source Is Cheaper than Commercial Software

Many companies are lured to open source applications by the potential to dramatically reduce their software license and administration costs. However, as Breen discovered, the additional costs and management burden that agencyQ had to absorb far outweighed these presumed cost-savings. "This is the myth that is the hardest

to dislodge from the collective consciousness," he says. "But if a company is going to have to live with the website and its CMS for three to five years, do they want to have to call in developers every time they want to make a change? Or does it make sense to empower business users to do some of it?"

"Some of our clients, who were initially adamant about using open source, very quickly turned around and went with Sitecore after we explained the benefits."

The slippery slope of open source

"We are a tech-savvy organization, but we do not want to turn into a software development house," Breen continues. "Open source is a slippery slope; when you look at the costs in isolation, it seems economical. But when you look at the total cost of ownership, open source is radically more expensive than most commercial solutions, for two reasons. First, the open source software is harder to implement, generally speaking. You can botch your environment if you're not exceedingly careful."

That said, Breen emphasizes, "I want to make it clear that it's not that I don't like open source; we use it in small jobs where support is not critical."

His second point is that "Labor is not cheap; installing software, fixing problems and requiring programmers to do simple tasks means you will be spending more money on services and less on the technology. Although this may seem counter-intuitive, you should invest in the technology – most of the potential for unexpected expense on any engagement is unplanned labor."

Why agencyQ chose Sitecore

From a purely financial standpoint, Breen has found Sitecore CMS to be extremely cost-effective, making it his primary choice for agencyQ's enterprise web development projects. "Software TCO starts with installation and implementation, both of which drive downstream costs. With Sitecore you can get started with the software much more easily, and it's much harder to do a bad installation," he says. These capabilities help ensure that any future CMS upgrades or solution development are predictable and cost-controlled. In addition, Sitecore's



clear upgrade path allows agencyQ to plan its deployments and expenses, in a way that Breen says is not possible in the open source community.

Furthermore, Breen adds, "Sitecore enables business users to make changes, such as day-to-day content management, very easily, without requiring a programmer to step in."

He notes that the math is easy: "Sitecore has done a really good job of pricing their base product, which translates into less than a person-month of labor. My rule of thumb is that if you can save a person-month of time by buying an excellent software package that is enterprise-class, it is well worth the investment. Some of our clients, who were initially adamant about using open source, very quickly turned around and went with Sitecore after we explained the benefits."

Summary

In Greek mythology, the Sirens were seductresses who lured nearby sailors with their enchanting music and voices, only to shipwreck on the rocky coast of their island. In the world of enterprise software, open source applications have an appeal that many companies find hard to resist, but if heeded, can lead to similarly disastrous results: runaway development costs, unpredictable delays, frustratingly slow responses to urgent support issues, and exponential growth in downstream upgrade and enhancement costs.

For expert technologists and business owners like Sean Breen of agencyQ, the allure of open source – flexibility and low cost – was indeed attractive, but the associated drawbacks ultimately outweighed the perceived benefits. Breen asks rhetorically, "Listen, if we, as an agency filled with web development professionals can't make open source a commercially viable choice, how can an over-extended corporate IT organization struggle with open source development and TCO issues for three to five years? Is that a wise use of corporate IT's time and energy?"

In Sitecore CMS he found an ideal alternative: "Sitecore is the best implementation of a CMS on the Microsoft .NET platform. It is cleanly built in such a fashion as to make great use of, and leverage, all the modern features of .NET."

Professionally developed and supported, Sitecore CMS is an enterprise-class solution that reduces agencyQ's business risk and all aspects of TCO. By delivering functionality that is proven, dependable, scalable, well-supported and has a clear upgrade path, Sitecore is agencyQ's web content management system of choice – all at a price that is less than a person-month's worth of programming time.



About agencyQ

Sean Breen is the founder of agencyQ and serves as the firm's Chief Executive Officer. In this role, Sean oversees agencyQ's overall strategy, ensuring the firm's service offerings are in sync with helping clients grow top line revenue and bottom line performance. His experience is informed by more than 20 years of identifying strategic technical, business and marketing solutions for Fortune 500 companies, the federal government, and nonprofits and associations.

Founded in 1999, agencyQ is a digital marketing agency that excels in four core services: Digital Marketing, Technology, Strategy and Design. The firm helps businesses harness the web to transform ideas into effective websites, applications and digital marketing campaigns. Headquartered in Washington, D.C., agencyQ serves a global portfolio of commercial, government and association and nonprofit organizations. For more information, visit www.agencyQ.com or call 1(866)734-7932.

About Sitecore

Sitecore redefines how organizations engage with their customers online, powering experiences that can sense and adapt to a customer's needs to increase revenue and customer lifetime value and satisfaction. Sitecore was the first Web Content Management system (WCM) to incorporate marketing automation, intranet portal, e-commerce, web optimization, social media and campaign management technologies into a cohesive, integrated open platform. Sitecore's software makes it easy for businesses to identify, serve, engage and convert new customers online.

Sitecore's broad choice of capabilities enable marketing professionals, business stakeholders and information technology teams to rapidly implement, measure and manage a successful website and online business strategy. Its powerful development platform, integrated marketing automation tools and intuitive editing workspace enables successful websites of all types.

Thousands of public and private organizations have created and now manage more than 24,000 dynamic websites with Sitecore including ATP World Tour, Computer Associates, ISS, Lloyd's of London, Microsoft, Omni Hotels, Siemens, Thomas Cook and The Knot.

For more information about Sitecore, please visit www.sitecore.net.