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The Total Economic Impact™ Of Sitecore CMS

Multicompany Case Study

Project Director: Michelle Bishop

Project Consultant: Michael Speyer

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Headquarters

Forrester Research, Inc., 400 Technology Square, Cambridge, MA 02139 USA
Tel: +1 617.613.6000 • Fax: +1 617.613.5000 • www.forrester.com

TABLE OF CONTENTS

Executive Summary	4
Purpose	4
Methodology.....	4
Approach.....	5
Key Findings	5
Disclosures.....	6
Sitecore CMS: Overview	8
Analysis.....	9
Interview Highlights.....	9
TEI Framework	11
Costs	12
Benefits	16
Risk.....	21
Flexibility.....	23
TEI Framework: Summary.....	24
Study Conclusions.....	26
Appendix A: Total Economic Impact™ Overview	27
Benefits	27
Costs	27
Risk.....	27
Flexibility.....	27
Appendix B: Glossary.....	28
Appendix C: About The Project Team Leaders.....	29

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Executive Summary

In August 2008, Sitecore commissioned Forrester Consulting to examine the total economic impact and potential return on investment (ROI) that enterprises may realize by deploying Sitecore CMS. Sitecore CMS is a content management and application development platform with support for Web standards and .NET that integrates with other enterprise software. This study illustrates the financial impact of deploying Sitecore CMS for the online presence and products of a multilocation travel division of a medium-sized sales and marketing services organization.

In conducting in-depth interviews with six existing customers, Forrester found that these companies achieved:

- Increased revenue due to improved customer retention rates from increased frequency of Web site and content updates.
- Increased revenue from additional customer services offered brought about by new abilities to implement desired online features.
- Labor savings for developers through quicker deployment, code reuse, and access to cheaper and more abundant .NET developer resources.
- Productivity savings for content administrators and/or marketers through an easy-to-use Web content management (WCM) system UI, as well as a more efficient Web content publishing process.
- Savings in advertising and marketing costs due to improved search engine optimization results.

Purpose

The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Sitecore CMS on their organizations. Forrester's aim is to clearly show all calculations and assumptions used in the analysis. Readers should use this study to better understand and communicate a business case for investing in Sitecore CMS.

Methodology

Sitecore selected Forrester for this project because of its industry expertise in enterprise content management, including WCM and digital asset management (DAM) and Forrester's Total Economic Impact™ (TEI) methodology. TEI not only measures costs and cost reduction (areas that are typically accounted for within IT), but it also weighs the enabling value of a technology in increasing the effectiveness of overall business processes.

For this study, Forrester employed four fundamental elements of TEI in modeling Sitecore CMS:

1. Costs and cost reduction.
2. Benefits to the entire organization.
3. Risk.

4. Flexibility.

Given the increasing sophistication that enterprises have regarding cost analyses related to IT investments including business applications, Forrester's TEI methodology serves an extremely useful purpose by providing a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

Approach

Forrester used a five-step approach for this study:

1. Forrester gathered data from existing Forrester research relative to Sitecore CMS and the content management system market in general.
2. Forrester interviewed Sitecore CMS product management, marketing, and sales personnel to fully understand the potential (or intended) value proposition of Sitecore CMS solutions.
3. Forrester conducted a series of in-depth interviews with six organizations currently using Sitecore CMS.
4. Forrester constructed a financial model representative of the interviews. This model can be found in the TEI Framework section below.
5. Forrester created a composite organization based on the interviews and populated the framework using data from the interviews as applied to the composite organization.

Key Findings

Based on our interviews with Sitecore customers, Forrester constructed a composite company, a TEI framework, and an associated ROI analysis. By aggregating the findings from the customer interviews and portraying a composite organization that is achieving value from Sitecore CMS, the study illustrated the financial impact of the Sitecore CMS solution.

Our company, "NewMarketsInc," is a sales and marketing services firm headquartered in North America with satellite offices in Europe. Forrester constructed this company to reflect an organization described as follows:

- A privately held company with annual revenue of \$850 million, 2,500 employees, and three divisions.
- Sitecore CMS was implemented for the travel division of the organization that provides marketing services to small and medium operators in the hotel and hospitality industry with a primary focus online. Included in these services are lead generation, online directory services, and Web site products such as turnkey template Web sites and custom Web site solutions.
- This organization had an aging in-house WCM platform to manage the travel division's online marketing services, and as part of an initiative to improve its template Web site product offering, it implemented Sitecore CMS for this line of business.

Forrester's study yielded the following key findings:

The Total Economic Impact™ Of Sitecore CMS

- **ROI.** Based on the interviews with the six existing customers, Forrester constructed a TEI framework for a composite organization and the associated ROI analysis illustrating the financial impact areas. As seen in Table 1, the risk-adjusted ROI for our composite company is 109%, with a breakeven point (payback period) of 1.1 years after deployment.
- **Benefits.** Benefits accruing to the composite company, which reflects the experience of the organizations interviewed for this study, amount to approximately \$2,525,614 (risk-adjusted, present value) over a three-year period. These financial benefits include labor savings from access to less expensive .NET developer resources, productivity gains from automation, process standardization and improved UI of the content management process, increased revenue from improved customer retention rates, and upsell of additional services and savings on advertising costs due to increased flow of customers through the online channel.
- **Costs.** Total costs to implement Sitecore CMS within the composite company total \$1,206,540 (risk-adjusted, present value) over the first three years. These costs include software license fees, maintenance, implementation costs, training fees, ongoing development, and administration costs.

Table 1 illustrates the risk-adjusted cash flow for the composite organization based on data and characteristics obtained during the interview process. Forrester risk-adjusts these values to take into account the potential uncertainty that exists in estimating the costs and benefits of a technology investment. The risk-adjusted value is meant to provide a conservative estimation, incorporating any potential risk factors that may later affect the original cost and benefit estimates. For a more in-depth explanation of risk and risk adjustments used in this study, please see the Risk section.

Table 1: Composite Company ROI, Risk-Adjusted

Ref.	Project cash flow	Calculation	Initial cost	Year 1	Year 2	Year 3	Total	PV/NPV
G1	Total costs		(\$969,775)	(\$95,207)	(\$95,207)	(\$95,207)	(\$1,255,395)	(\$1,206,540)
H1	Total benefits		\$0	\$1,015,587	\$1,015,587	\$1,015,587	3,046,760	2,525,614
I1	Net savings			\$920,380	\$920,380	\$920,380	\$1,791,365	\$1,319,074
J1	ROI	(H1-G1)/G1						109%

Source: Forrester Research, Inc.

Note that calculation totals throughout the study may not align because of rounding.

Forrester found that higher ROIs were associated with companies whose Web sites are designed for eCommerce and other directly revenue-generating activities.

Disclosures

The reader should be aware of the following:

- The study is commissioned by Sitecore and delivered by the Forrester Consulting group.

The Total Economic Impact™ Of Sitecore CMS

- Sitecore reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.
- The customer names for the interviews were provided by Sitecore.
- Forrester makes no assumptions as to the potential return on investment that other organizations will receive. Forrester strongly advises that readers should use their own estimates within the framework provided in the report to determine the appropriateness of an investment in Sitecore and Sitecore CMS.
- This study is not meant to be used as a competitive product analysis.

Sitecore CMS: Overview

According to Sitecore, Sitecore's Web Content Management System (CMS) and portal software solutions enable companies to deliver compelling Web experiences. The award-winning CMS software makes it easy for businesses to create and keep up to date dynamic, full-featured Web sites of all types. Sitecore's industry-leading flexibility and scalability allows companies to better leverage their content to improve customer experience and drive business growth.

- **Putting marketing in the driver's seat.** Sitecore is the first Web CMS designed to put marketing and business decision-makers in the Web site driver's seat. Sitecore's intuitive interface and in-line editing allow marketers to easily manage Web sites, regardless of skill level. Features such as the innovative Page Designer and Grid Designer give the entire business team the ability to adjust whole Web pages in minutes. Additional capabilities such as SEO functionality, high-performance eMarketing tools, newsletter tools, Web forums, and powerful search give marketers and business execs the tools they need to be in total control of the Web site.
- **Unifying Web content management with Marketing Automation.** Sitecore CMS allows marketers to learn visitor behavior in real time — where they went and why — and personalize content based on their behavior. Sitecore's insight into visitors and ability to reach out with trickle and trigger marketing integrates sales and marketing effectiveness for maximum performance.
- **Scaling to meet any Web site need.** Sitecore is the industry leader in scalability, managing modest size Web sites as well as the largest sites on the planet. Sitecore supports multisite, multilanguage, and multidevice flexibility, with powerful tools for brand enforcement and content compliance, along with rich integration capabilities. Sitecore not only supports these capabilities but provides considerable flexibility, elegance, and simplicity in the way these abilities are deployed and managed.
- **Providing a powerful development platform.** Sitecore gives developers unprecedented freedom and powerful tools based on the latest Microsoft technology. Totally committed to the .NET framework, Sitecore has been the leader in Microsoft compatibility for Web CMS, rapidly staying current with the latest releases of .NET, Visual Studio, SQL Server, and Windows Server with a rich and deep API. Its open structure and .NET programming languages give the user access to more than 1,300 classes and 5,000 methods. Sitecore provides the leading developer capabilities, including strict separation of content from presentation, component, XML-based architecture, caching and performance optimization tools, and much more.
- **Managing the world's most advanced Web sites.** Thousands of public and private organizations, including national governments and Fortune 500 companies, use Sitecore solutions for their Web sites. These organizations have created and now manage more than 20,000 dynamic Web sites with Sitecore including Microsoft, Sara Lee, the US Department of Defense, Siemens, GlaxoSmithKline, Toshiba, Omni Hotels, Computer Associates, Mazda, and the Atlanta Falcons. Sitecore has offices and representatives in more than 50 countries around the world, with an extensive network of implementation and solution partners numbering more than 300 worldwide.

Analysis

As stated in the Executive Summary, Forrester took a multistep approach to evaluate the impact that implementing Sitecore CMS can have on an organization:

- Interviews with Sitecore product management, marketing, and sales personnel.
- In-depth interviews of six organizations currently using Sitecore CMS.
- Construction of a common financial framework for the implementation of Sitecore CMS.
- Construction of a composite organization based on characteristics of the interviewed organizations.

Interview Highlights

A total of six interviews were conducted for this study, involving representatives from the following companies:

1. A sales and marketing services firm, with offerings around employee incentive and customer loyalty programs, events management, and also traditional marketing services such as product launch campaigns, with more than \$1.2 billion in revenue. Headquartered in North America, it also has locations in the UK and Germany.
2. A local subsidiary in Europe of a global travel services company, with more than \$30 billion in annual revenue.
3. A publicly held ski resort and real-estate management company with more than \$1 billion in annual revenue, based in North America.
4. The online marketing services arm of a US-based document information company that serves law firms in North America.
5. A leading engineering, design, and consultancy company headquartered in Europe with 10 business units in more than 150 locations worldwide.
6. A leading office products wholesaler serving the Benelux region in Europe with revenue of more than €150 million annually.

The six in-depth interviews uncovered a number of important insights:

- Most of the interviewed organizations had undertaken a thorough vendor evaluation process before picking Sitecore CMS for their WCM platform. Apart from a detailed RFP, some customers staged a technology evaluation with a series of exercises for each vendor. It was noted that these exercises were very helpful in exposing which solutions had the functionality that the organizations needed.
- .NET was consistently cited as one of the key factors in the decision of the organizations interviewed. These customers directly translated that into labor savings for the teams, as .NET resources are cheaper and more readily available than Java developers. For

customers that were a Microsoft shop, the ability to work within a framework without a steep learning curve for new technology was always part of the appeal of Sitecore CMS.

- Customers noted that they chose Sitecore CMS because “it was more of a development platform instead of just a straight-out-of-the-box CMS solution”. Customers were attracted to the flexibility of the solution to adapt to their particular needs, to “implement new ways of doing things.”

Such flexibility ranged from code reuse for subsequent ease of development to the ability to enable a Web page to use content from other repositories (such as lodging content geography on Google maps with lodging repository information like rates, availability, and restrictions) to integrating their CRM and ERP systems via Web services.

One organization used the platform as a direct-to-consumer solution for their needs, emphasizing that the flexibility and scalability of Sitecore was another reason for their choice.

- Search engine optimization was also consistently cited as a significant and tangible benefit that the companies experienced with their Sitecore CMS implementation. One senior manager noted, “Sitecore CMS really enabled us to implement a much better, faster, quicker search engine optimization strategy for our Web sites using URLs, using redirects, using keywords — sort of forcing content owners to configure pages correctly for search engine optimization. That's been a huge benefit for us.” SEO improvement for another interviewed organization allowed them to increase their customers through their online channel, which lowered customer acquisition costs for their company.
- Another selling point for Sitecore CMS was its ease of use for the end user/content editor. One customer noted, “From a usability perspective on the front-end side, the marketing team really likes its [Sitecore CMS] interface and its usability,”

For organizations that used to require development, QA, configuration management, and release testing to publish Web content, the ability for a business analyst or content editor to make edits and publish directly through Sitecore CMS through an easy UI directly translates to savings.

- The interviewed customers who used their Web sites for eCommerce experienced revenue gains from Sitecore CMS. One customer cited faster time-to-market as a direct benefit; they were able to roll out promotions quickly on their Web site with “huge benefits” to their business.
- In terms of the implementation process, a manager of Interactive Efforts for one customer with a six-month technical implementation noted, “Our developers felt that this system was very straightforward. There was some good documentation that came with the system. Their support line and salespeople were a big help in any kind of problems that we came across, and they had an immediate solution for any kind of challenges that we came across. One of the things that we talked about was how easy the implementation phase of this project was. And I think a lot of it had to do with how easy it was to work with the Sitecore content management system.” At the same time, organizations interviewed in smaller geographic markets emphasized the importance of finding the right partner or third-party integration vendor with .NET experience to implement the Sitecore CMS solution.

TEI Framework

Introduction

From the information provided in the in-depth interviews, Forrester has constructed a TEI framework for those organizations considering implementation of Sitecore CMS. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

Composite Organization

Based on the interviews with the six existing customers provided by Sitecore, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas affected financially. The composite organization that Forrester synthesized from these results (also known as NewMarketsInc) represents a US-based marketing services firm with 2,500 employees and \$850 million in annual revenue. Forrester created this composite company to reflect an organization described as follows.

Environment Prior To Investment

- Four different external-facing corporate Web sites for the travel sales and marketing services group with disparate management levels. Some were being managed through the homegrown in-house content management platform, while others were using other CMS solutions.
- More than 10,000 customer Web sites for the travel sales and marketing services group were managed on an aging content management platform developed in-house.

Reasons For Investment In Sitecore CMS

- The group wanted to update its division's Web site and streamline the Web publishing process for the multilingual requirements of four different locales: US, UK, Germany, and France.
- The group wanted to improve its product offering for the template Web site product in the form of modernized templates, new features, and service models. The group wanted to offer a self-service model that would enable its customers to implement content changes on their own.
- Maintenance costs for the in-house platform were rising. The marketing services group was unable to implement cost-effective upgrades to the template Web site product.

Framework Assumptions

Table 2 lists the discount rate used in the present value (PV) and net present value (NPV) calculations and time horizon used for the financial modeling.

Table 2: General Assumptions

Ref.	General assumptions	Value
	Discount rate	10%
	Length of analysis	Three years

Source: Forrester Research, Inc.

Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult with their finance team to determine the most appropriate discount rate to use within their own organizations.

In addition to the financial assumptions used to construct the cash flow analysis, Table 3 provides salary assumptions used within this analysis.

Table 3: Salary Assumptions

Ref.	Metric	Calculation	Value
A1	Hours per week		40
A2	Weeks per year		52
A3	Hours per year (M-F, 9-5)		2,080
A4	Developer (fully loaded cost including benefits)		\$85,000
A5	Hourly	(A4/A3)	\$40.86

Source: Forrester Research, Inc.

Costs

The key cost categories associated with Sitecore CMS are: a) Sitecore CMS software license fees; b) maintenance fees; c) additional hardware costs; d) additional software costs; e) internal implementation costs; f) professional implementation fees; g) training fees; h) operational and ongoing development costs; and i) administration costs.

Sitecore CMS License Fees

License fees for Sitecore CMS are priced at three different levels, characterized by the number of servers and editors that a customer will use. At the Enterprise license level, pricing is structured according to the particular configuration required by a customer.

NewMarketsInc has the requirement of enabling multiple editors for the travel sales and marketing services group's template Web site product. The composite organization wanted to have the ability to offer self-service editing capability for their 10,000-plus consumer Web sites serving small and medium business in the hotel industry, such as inns and resorts. Pricing for this configuration at the Enterprise level is **\$210,000**.

Sitecore CMS Maintenance Fees

Maintenance fees for the composite organization are computed at 20% of the total software license fees. At a license fee of \$210,000, the maintenance fees paid for by the company is **\$42,000 per year**.

Additional Hardware Costs

Apart from reconfiguring servers already available to the company, the composite organization also has to purchase additional production servers to support Sitecore CMS. These purchases included two additional database servers at a cost of \$15,000 each for a total cost of **\$30,000** for additional hardware.

Additional Software Costs

The composite organization also purchased server software totaling \$30,000 in aggregate. Additional Microsoft SQL Server licenses cost the composite organization another \$10,000. Total costs for additional software are **\$40,000**.

Implementation Costs — Internal

The interviewed companies noted varying implementation times, from three months to 14 months, all depending on the complexity of the Sitecore CMS implementation. Implementation costs for the Sitecore CMS solution for NewMarketsInc consists of: a) the labor associated with the product evaluation process and internal training; b) labor associated with configuration and development on the Sitecore CMS platform, including quality control, and usability design; and c) labor associated with content and template development.

Developer labor costs for implementation are estimated at 50% of seven FTE (full-time equivalent) for 12 months. At 1,040 hours at an hourly rate of \$40.87 fully loaded, this translates to \$297,500 in total developer implementation costs.

Content development costs at implementation are estimated at 20% of 10 FTE (full-time equivalent) for 12 months. The fully loaded compensation (salary plus benefits) for this marketing resource is \$60,000 per year or \$28.85 per hour. At 416 hours per FTE, implementation costs for these marketing resources total \$120,000.

In aggregate, the total internal implementation costs for the composite organization is **\$417,500**.

Table 4: Implementation Costs — Internal

Ref.	Metric	Calculation	Per period
A1	Number of people — developers		7
A2	Hourly rate per person — developers		\$40.87
A3	Hours		1,040
A4	Number of people — content		10
A5	Hourly rate per person — content		\$28.85
A6	Hours		416
At	Implementation costs — internal	$(A1 * A2 * A3) + (A4 * A5 * A6)$	\$417,500

Source: Forrester Research, Inc.

Implementation — Professional Fees

All customers interviewed used third-party integration vendors or outside consultants in their Sitecore CMS implementation and associated Web site projects. Some customers contracted these vendors on their own, while others approached Sitecore for recommendations on preferred partners. Professional fees for these vendors varied according to the length and complexity of each customer implementation.

The composite organization spent **\$200,000** in professional fees in the implementation of Sitecore CMS for its marketing services group.

Training Fees

Sitecore customers' options for Sitecore CMS training include training at Sitecore's headquarters, remote training at the integration partner site, or on-site training at the customer site.

NewMarketInc's training cost for its Sitecore CMS implementation included sending four personnel to Sitecore CMS administrator training and three personnel to the Sitecore CMS developer course at a cost of \$2,000 per person. Total training fees are estimated at **\$14,000**.

Table 5: Training Fees

Ref.	Metric	Calculation	Per period
A1	Number of people		7
A2	Cost per person		\$2,000
At	Training fees	A1*A2	\$14,000
Ato	Total (original)		(\$14,000)

Source: Forrester Research, Inc.

Operational And Ongoing Development Costs

Sitecore CMS allowed customers who were previously operating on in-house CMS platforms to offer new features and functionality to their Web sites. According to the interviewed customers, this covered the range of applications from new customer Web templates to rolling-out a corporate search engine within its intranet. There are associated costs with these operational development projects.

For the composite organization to continually develop a more robust product offering for its Web site templates, the marketing services group now releases new templates annually for its customers. Development hours for these templates are estimated at 1,250 hours per year. At labor costs of \$40.87 per hour for one developer FTE (full-time equivalent), the total cost of producing these new Web site templates are estimated at **\$51,082 per year**.

Administration Costs

The composite organization also incurs administration costs from maintaining the Sitecore account relationship, managing user permissions for editors and developers, and assisting people who are locked out of their accounts. Labor costs for these administrative duties are estimated at 1 hour per week for a cost of **\$2,125 annually**.

Table 6: Administration Costs

Ref.	Metric	Calculation	Per year
A1	Number of FTE		1
A2	Hourly rate per FTE		\$40.87
A3	Hours per year		52
At	Administrative costs	A1*A2*A3	\$2,125

Source: Forrester Research, Inc.

Total Costs

The costs described above are summarized in Table 7 below. The cost for implementing the Sitecore CMS solution for the composite organization totals \$1,197,120 over a three-year analysis.

Table 7: Total Costs of Sitecore CMS

Costs	Initial	Year 1	Year 2	Year 3	Total
Sitecore software license fees	(210,000)				(210,000)
Software license fees (yearly)		(42,000)	(42,000)	(42,000)	(126,000)
Additional hardware costs	(30,000)				(30,000)
Additional software license fees	(40,000)				(40,000)
Implementation costs —internal	(417,500)				(417,500)
Professional fees for implementation	(200,000)				(200,000)
Training fees	(14,000)				(14,000)
Operational and ongoing development costs		(51,082)	(51,082)	(51,082)	(153,245)
Administrative costs		(2,125)	(2,125)	(2,125)	(6,375)
Total	(\$911,500)	(\$95,207)	(\$95,207)	(\$95,207)	(\$1,197,120)

Source: Forrester Research, Inc.

Benefits

“What’s really nice about Sitecore and .NET is that it provides a very fast, flexible, and smart way to organize not only content but also the development code — the modules that you build, the widgets that might show up on your Web site. It’s a framework that allows you to more quickly develop and reuse code.” — Senior Interactive Manager, Sitecore customer

Sitecore’s customers quantified the following benefits of using Sitecore CMS.

Labor Savings

Customers interviewed all noted that using Sitecore CMS resulted in labor savings when compared with the cost of building the same features and functionality using their previous solutions (basic CMS, direct HTML updates, or an aging WCM platform developed in-house). These savings came in the form of fewer full-time developer resources to manage and maintain Web sites, cheaper developer resources as organizations moved from Java developers to .NET developers, the time saved from the ability to reuse code through Sitecore CMS, and eliminating the need to outsource projects to meet deadlines for promotional releases.

One company interviewed that was developing five customer-facing Web sites reused code, resulting in only a two-day development time per Web site after an initial two-week development. In the company’s old system, each Web site would have taken approximately three weeks each to develop. On average, labor savings for the organizations interviewed ranged from 25% to 60% for their internal resources, depending on size and complexity of the implementation.

For the composite company, NewMarketsInc, labor savings were translated as savings that the organization received from using cheaper .NET developer resources when compared with the Java developers they would have used without Sitecore CMS. The comparison of the compensation and ubiquity of .NET versus Java developers is conservatively estimated as a \$50,000 price differential. At seven developers supporting the travel sales and marketing services group, the total developer labor savings due to Sitecore CMS totals **\$1,050,000** over a three-year analysis.

Table 8: Labor Savings — Development

Ref.	Metric	Calculation	Per period	Year 2	Year 3	Total
A1	Number of workers (saved)		7			
A2	Yearly rate per worker		50,000			
At	Labor savings from using .NET developers	A1*A2	350,000			
Ato	Total (original)		\$350,000	\$350,000	\$350,000	\$1,050,000

Source: Forrester Research, Inc.

Productivity Gains

Implementing Sitecore CMS also resulted in productivity gains for resources (usually marketing staff) responsible for the content on their Web sites. Prior to Sitecore CMS, marketing staff of the customers interviewed would take longer to roll out content changes to the different Web sites they were managing because of inefficiencies in their homegrown WCM systems. Reasons cited included the difficult-to-navigate UI, or the unavailability of an already “stretched” developer resource faced with multiple project requests from content administrators. This was an even bigger challenge for customers without an in-house WCM system and those that were handling multilingual Web sites.

Sitecore CMS enabled these organizations to standardize and simplify their Web content publishing process. This improved efficiency led to productivity savings for the organizations’ content administrators/editors.

For the composite organization, it is estimated that Sitecore CMS saved each content editor an estimated 30% of their time annually, equivalent to 624 hours for each marketing staff per year. When calculating productivity savings, Forrester estimates that not all time saved will be directly converted to productive time. With Forrester conservatively estimating that only 50% of these productivity gains from portfolio management reporting will be captured by the organization, at a fully loaded compensation of \$60,000 annually per marketing/content editor, the savings in this benefit area is **\$270,000** over three years for a team of 10 content editors.

Table 9: Productivity Gains — Content

Ref.	Metric	Calculation	Per period	Year 2	Year 3	Total
A1	Number of workers		10			
A2	Hourly rate per worker		\$28.85			
A3	Number of hours (saved)		624			
A4	Percent captured		50%			
At	Productivity gains — content	$A1 \cdot A2 \cdot A3 \cdot A4$	90,000			
Ato	Total (original)		\$90,000	\$90,000	\$90,000	\$270,000

Source: Forrester Research, Inc.

Increased Gross Revenue From Improved Customer Retention Rates

One of the marketing and lead-generation services that the travel division of NewMarketsInc offers to small and medium operators in the hotel and hospitality industry is turnkey template Web sites linked to the company’s travel directory offering. Prior to the Sitecore CMS implementation, these 12,000 customer Web sites were managed through an in-house WCM system that was growing increasingly expensive to maintain. It was cost prohibitive for the organization to roll out new templates and functionality for its customer base. In an initiative to modernize and improve this online product offering, NewMarketsInc implemented the Sitecore CMS platform.

The Total Economic Impact™ Of Sitecore CMS

With the launch of the new templates on the new CMS platform, NewMarketsInc saw customer retention rates improve from 60% to 68% annually. This improvement translates to an additional 960 customers per year. Average annual revenue per template Web site product prior to the product revamp was \$825 per Web site. With the product revamp, the organization was also able to double the annual subscription rates to \$1,650. At a gross margin of 25% for the composite organization, the gross revenue from increased customer retention rates and a higher annual subscription fee total **\$1,188,000** over three years.

Table 10: Portfolio Management Reporting Time Savings

Ref.	Metric	Calculation	Per period	Year 2	Year 3	Total
A1	Number of Web sites		12,000			
A2	Increase in customer retention rates		8%			
A3	Average revenue per Web site		\$1,650			
A4	Gross margin		25%			
At	Gross revenue from increased customer retention rates	$A1 * A2 * A3 * A4$	396,000			
Ato	Total (original)		\$396,000	\$396,000	\$396,000	\$1,188,000

Source: Forrester Research, Inc.

The composite organization illustrated in this study took CMS, typically an enterprise product, and made it available to a consumer audience as part of a revenue-generating line of business. Forrester makes no assumptions as to the potential return that other organizations will receive within their own environment. Forrester strongly advises that readers use their own estimates and business model within the framework provided in this study to determine the expected financial impact of implementing Sitecore CMS.

Increased Gross Revenue From Additional Services

Because of the development and deployment efficiency enabled by Sitecore CMS, the composite organization is now able to offer additional services to its customers that it would not have been capable of cost-efficiently implementing in its former in-house WCM platform. These services are a source of additional revenue for the company.

NewMarketsInc now offers search engine optimization (SEO) services to its customers. This is a growth area for the company as every Web site customer is potentially an SEO customer. Currently though, only 1% of NewMarketsInc's template Web site customers avail of this premier service which is priced, on average, at \$7,000. At a gross margin of 25% for the composite organization, the gross revenue from additional services total **\$630,000** over three years.

Table 11: Avoided Cost — Local ID And IT Support

Ref.	Metric	Calculation	Per period	Year 2	Year 3	Total
A1	Number of customers		12,000			
A2	Percentage penetration for SEO services		1%			
A3	Average revenue for SEO services		\$7,000			
A4	Gross margin		25.0%			
At	Gross revenue from additional services	$A1 * A2 * A3 * A4$	210,000			
Ato	Total (Original)		\$210,000	\$210,000	\$210,000	\$630,000

Source: Forrester Research, Inc.

Savings From Improved Search Engine Optimization

“We've been able to radically improve our search engine optimization. That's actually one of the selling points of Sitecore, and it's very true.” — Senior Interactive Manager, Sitecore customer

Customers we interviewed that were using their external Web sites for eCommerce, such as promotions and product sales, made a point to note that their implementation of Sitecore CMS resulted in improved search engine optimization (SEO) results. Sitecore CMS functionality, as well as the standardization of the Web publishing process, “forces” content owners to configure pages correctly for search engine optimization.

For these customers, higher rankings on search engines led to more click-throughs to their Web sites and increased online customer conversion. As the online channel is a cheaper alternative to other marketing channels such as CRM or affiliate marketing, this results in lower overall customer acquisition costs.

The composite organization also used Sitecore CMS as the platform for building its Web site with direct-to-consumer travel services offerings. Total cost of acquisition for each customer for these offerings is \$45. The online channel averages 3.5% of this acquisition cost, while the next higher percentage is the affiliate marketing channel with 10%. The difference between the two channels is 6.5%. This model conservatively estimates that the customers acquired through the online channel are diverted from the affiliate marketing channel, and the 6.5% difference translates to customer acquisition cost savings.

Prior to implementing Sitecore CMS, the number of unique visitors from search engine results was 9,000 per month or 108,000 per year. After the implementation, the number of unique visitors increased by 600%. At an estimated online customer conversion rate of 5%, the composite organization saves **\$265,356** over a three-year period.

The Total Economic Impact™ Of Sitecore CMS

These customer acquisition cost savings through the online channel can be funneled back into increasing the budget for other channels that make up the customer acquisition cost pie.

Table 12: Avoided Cost — Basic Project Software License Fees

Ref.	Metric	Calculation	Per period	Year 2	Year 3	Total
A1	Total cost of acquisition		42			
A2	% difference in cost of affiliate marketing from online channel		6.5%			
A3	Number of unique visitors before SEO project		108,000			
A4	% improvement		600%			
A5	Conversion rate		5%			
At	Savings from improved SEO efforts	$A1 \cdot A2 \cdot A3 \cdot A4 \cdot A5$	88,452			
Ato	Total (original)		\$88,452	\$88,452	\$88,452	\$265,356

Source: Forrester Research, Inc.

Total Benefits — Quantified

The sum of the benefits of Sitecore CMS accruing to the composite company, NewMarketsInc, is \$3,403,356, with a present value of \$2,821,214. Readers of this study should recall that Forrester has calculated only the benefits that the interviewed Sitecore customers have experienced and were able to quantify within a range of estimates. Readers who are considering implementing the Sitecore CMS solution should use this study as a starting point for their organization's business case for Sitecore CMS; there maybe other quantifiable benefits of Sitecore CMS particular to your organization that have not been quantified herein.

Table 13 summarizes the annual, total, and present value of the benefits described above.

Table 13: Benefits Summary

Benefits	Initial	Year 1	Year 2	Year 3	Total	Present value
Labor savings from using .NET developers		350,000	350,000	350,000	1,050,000	870,398
Productivity gains — content		90,000	90,000	90,000	270,000	223,817

The Total Economic Impact™ Of Sitecore CMS

Gross revenue from increased customer retention rates		396,000	396,000	396,000	1,188,000	984,793
Gross revenue from additional services		210,000	210,000	210,000	630,000	522,239
Savings from Improved SEO results		88,452	88,452	88,452	265,356	219,967
Total		\$1,134,452	\$1,134,452	\$1,134,452	\$3,403,356	\$2,821,214

Source: Forrester Research, Inc.

Risk

Risk is the third component within the TEI model; it is used as a filter to capture the uncertainty surrounding different cost and benefit estimates. If a risk-adjusted ROI still demonstrates a compelling business case, it raises confidence that the investment is likely to succeed because the risks that threaten the project have been taken into consideration and quantified. The risk-adjusted numbers should be taken as “realistic” expectations, since they represent the expected values considering risk. In general, risks affect costs by raising the original estimates, and they affect benefits by reducing the original estimates.

For the purpose of this analysis, Forrester risk-adjusts cost and benefit estimates to better reflect the level of uncertainty that exists for each estimate. The TEI model uses a triangular distribution method to calculate risk-adjusted values. To construct the distribution, it is necessary to first estimate the low, most likely, and high values that could occur within the current environment. The risk-adjusted value is the mean of the distribution of those points.

For example, take the case of Sitecore CMS implementation costs. The \$417,500 value used in this analysis can be considered the “most likely” or expected value. Implementation costs may vary based on the number of users or the degree of customization and configuration required. This variability represents a risk that must be captured as part of this study. Forrester uses a risk factor of 140% on the high end, 100% as the most likely, and 100% on the low end. This has the effect of increasing the cost estimate to take into account the fact that original cost estimates are more likely to be revised upward than downward. Forrester then creates a triangular distribution to reflect the range of expected costs, with 113% as the mean (113% is equal to the sum of 140%, 100%, and 100% divided by three). Forrester applies this mean to the most likely estimate, \$417,500, to arrive at a risk-adjusted value of \$471,175.

Risk adjustments for benefits reduce the original benefits estimates. For example, Forrester applies a risk range of 70% on the low end of the estimate and 100% on the most-likely and high end for productivity savings from reporting. This has the effect of reducing the benefit estimate by 10%, equal to 90% of the original value.

The following risks were considered in this study:

- **Implementation risks.** Risk factors for internal implementation are higher than risks for using external implementation resources, as risks for the latter can be mitigated through contracts.

The Total Economic Impact™ Of Sitecore CMS

- **Variability of revenue**, due to the different business models of the organizations that use Sitecore CMS.
- **Variability in labor savings**, due to the variability in skills and experience of .NET versus Java developers.

The following tables show the values used to adjust for uncertainty in cost and benefit estimates. Different cost and benefit estimates have different levels of risk adjustments depending on variability and other factors. Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

Table 14: Risk Factors — Costs

Costs	Original estimate	Low	High	Mean
Sitecore software license fees	100%	100%	100%	100%
Software license fees (yearly)	100%	100%	100%	100%
Additional hardware costs	100%	100%	100%	100%
Additional software license fees	100%	100%	100%	100%
Implementation costs — internal	100%	100%	140%	113%
Professional fees for implementation	100%	100%	105%	102%
Training fees	100%	100%	100%	100%
Operational and ongoing development costs	100%	100%	100%	100%
Administrative costs	100%	100%	100%	100%

Source: Forrester Research, Inc.

Table 15: Risk Factors — Benefits

Benefits	Original estimate	Low	High	Mean
Labor savings from using .NET developers	100%	80%	100%	93%
Productivity gains — content	100%	80%	100%	93%
Gross revenue from increased customer retention rates	100%	70%	100%	90%
Gross revenue from additional services	100%	70%	100%	90%
Savings from improved SEO results	100%	100%	100%	100%

Source: Forrester Research, Inc.

The Total Economic Impact™ Of Sitecore CMS

The risk factors in Tables 14 and 15 are applied to the benefits and costs listed earlier, resulting in the risk-adjusted cost and benefit values in Tables 16 and 17:

Table 16: Total Costs — Risk-Adjusted

Cost	Step 1: Original estimate	Low	High	Step 2: Risk adjustment	
				%	value
Software license fees	\$180,000	\$180,000	\$180,000	100%	\$180,000
Implementation costs	\$8,654	\$8,654	\$9,952	105%	\$9,087
Training fees	\$10,495	\$10,495	\$12,069	105%	\$11,020
Administrative costs	\$7,500	\$7,500	\$7,500	100%	\$7,500

Source: Forrester Research, Inc.

Table 17: Total Benefits — Risk-Adjusted

Benefit	Step 1: Original estimate	Low	High	Step 2: Risk-adjustment	
				%	value
Productivity savings — reporting	\$337,500	\$270,000	\$337,500	93%	\$313,875
Productivity savings — standardization	\$14,424	\$11,539	\$14,424	93%	\$13,414
Productivity savings — portfolio management	\$43,269	\$30,288	\$43,269	90%	\$38,942
Avoided cost — local ID and IT support	\$100,000	\$70,000	\$100,000	90%	\$90,000
Avoided cost — basic project software license	\$31,500	\$31,500	\$31,500	100%	\$31,500
Server redeployment and maintenance savings	\$18,000	\$18,000	\$18,000	100%	\$18,000

Source: Forrester Research, Inc.

Flexibility

Flexibility, as defined by Forrester’s TEI methodology, represents an investment in additional capacity or agility today that can be turned into future business benefits at some additional cost. This provides an organization with the “right” or the ability to engage in future initiatives, but not the obligation to do so.

The Total Economic Impact™ Of Sitecore CMS

Although data for calculating the value of several flexibility options is insufficient at this time, Forrester identified the following areas that present flexibility options for the composite organization through Sitecore CMS:

- With the new WCM processes through Sitecore CMS, the organization can consider new projects such as quarterly updates to the product offering and connecting to the organization's CRM or ERP system to improve the customer experience. These projects can be delivered at a cheaper cost as compared to the previous system.
- New Web product offerings created through Sitecore CMS can contribute to business benefits with the investment of product management, content, and developer time creating these offerings. These offerings could take the form of promotions or other revenue-generating activities.

The value of flexibility is unique to each organization, and the willingness to measure its value varies from company to company (see Appendix A for additional information regarding the flexibility calculation).

TEI Framework: Summary

Considering the financial framework constructed above, the results of the costs, benefits, risk, and flexibility sections using the representative numbers can be used to determine a return on investment, net present value, and payback period. Table 18 shows the consolidation of the numbers for the composite organization.

Table 18: Total Costs And Benefits, Non-Risk-Adjusted

Ref.	Project cash flow	Calculation	Initial cost	Year 1	Year 2	Year 3	Total	PV/NPV
F	Total costs		(\$911,500)	(\$95,207)	(\$95,207)	(\$95,207)	(\$1,197,120)	(\$1,148,265)
G	Total benefits		\$0	\$1,134,452	\$1,134,452	\$1,134,452	3,403,356	2,821,214
C	Net savings	(G-F)		\$1,039,245	\$1,039,245	\$1,039,245	\$2,206,236	\$1,672,949
D	ROI	(G-F)/F						146%

Source: Forrester Research, Inc.

Tables 19 shows the risk-adjusted values, applying the risk adjustment method indicated in the Risks section.

Table 19: Total Costs And Benefits, Risk-Adjusted

Ref.	Project cash flow	Calculation	Initial Cost	Year 1	Year 2	Year 3	Total	PV/NPV
E	Total costs		(\$969,775)	(\$95,207)	(\$95,207)	(\$95,207)	(\$1,255,395)	(\$1,206,540)
F	Total benefits		\$0	\$1,015,587	\$1,015,587	\$1,015,587	3,046,760	2,525,614

The Total Economic Impact™ Of Sitecore CMS

G	Net savings	(F-E)		\$920,380	\$920,380	\$920,380	\$1,791,365	\$1,319,074
H	ROI	(F-E)/E						109%

Source: Forrester Research, Inc.

It is important to note that values used throughout the TEI Framework are based on in-depth interviews with six organizations and the resulting composite organization built by Forrester. Forrester makes no assumptions as to the potential return that other organizations will receive within their own environment. Forrester strongly advises that readers use their own estimates within the framework provided in this study to determine the expected financial impact of implementing Sitecore CMS.

Study Conclusions

Forrester's in-depth interviews with Sitecore CMS's customers yielded several important observations. Forrester found that organizations can realize benefits in the form of:

- Increased revenue due to improved customer retention rates from increased frequency of Web site and content updates.
- Increased revenue from additional customer services offered due to new abilities to implement desired online features.
- Labor savings for developers through quicker deployment, code reuse, and access to cheaper and more abundant .NET developer resources.
- Productivity savings for content administrators and/or marketers through an easy-to-use Web content management (WCM) system UI, as well as a more efficient Web content publishing process.
- Savings in advertising and marketing costs due to improved search engine optimization results.

The financial analysis provided in this study illustrates how an organization may evaluate the value proposition of Sitecore CMS. Based on information collected in six customer interviews, Forrester calculated a three-year risk-adjusted ROI of 109% for NewMarketsInc, the composite organization, with a payback period of 1.1 years. All final estimates are risk-adjusted to incorporate potential uncertainty in the calculation of costs and benefits.

Based on these findings, companies looking to implement Sitecore CMS can see labor savings, productivity gains, increased revenue, and cost savings. Using the TEI framework, many companies may find the potential for a compelling business case to make such an investment.

Table 20: ROI, Original And Risk-Adjusted

Summary financial results	Original estimate	Risk-adjusted
ROI	146%	109%
Payback period (years)	0.9	1.1
Total costs (PV)	(\$1,148,265)	(\$1,206,540)
Total benefits (PV)	\$2,821,214	\$2,525,614
Total (NPV)	\$1,672,949	\$1,319,074

Source: Forrester Research, Inc.

Appendix A: Total Economic Impact™ Overview

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

The TEI methodology consists of six components to evaluate investment value: benefits, costs, risks, and flexibility. For the purpose of this analysis, the impact of flexibility was not quantified.

Benefits

Benefits represent the value delivered to the user organization — IT and/or business units — by the proposed product or project. Often product or project justification exercises focus just on IT cost and cost reduction, leaving little room to analyze the effect of the technology on the entire organization. The TEI methodology and the resulting financial model place equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization. Calculation of benefit estimates involves a clear dialogue with the user organization to understand the specific value that is created. In addition, Forrester also requires that there be a clear line of accountability established between the measurement and justification of benefit estimates after the project has been completed. This ensures that benefit estimates tie back directly to the bottom line.

Costs

Costs represent the investment necessary to capture the value, or benefits, of the proposed project. IT or the business units may incur costs in the forms of fully burdened labor, subcontractors, or materials. Costs consider all the investments and expenses necessary to deliver the proposed value. In addition, the cost category within TEI captures any incremental costs over the existing environment for ongoing costs associated with the solution. All costs must be tied to the benefits that are created.

Risk

Risk measures the uncertainty of benefit and cost estimates contained within the investment. Uncertainty is measured in two ways: the likelihood that the cost and benefit estimates will meet the original projections and the likelihood that the estimates will be measured and tracked over time. TEI applies a probability density function known as "triangular distribution" to the values entered. At a minimum, three values are calculated to estimate the underlying range around each cost and benefit.

Flexibility

Within the TEI methodology, direct benefits represent one part of the investment value. While direct benefits can typically be the primary way to justify a project, Forrester believes that organizations should be able to measure the strategic value of an investment. Flexibility represents the value that can be obtained for some future additional investment building on top of the initial investment already made. For instance, an investment in an enterprisewide upgrade of an office productivity suite can potentially increase standardization (to increase efficiency) and reduce licensing costs. However, an embedded collaboration feature may translate to greater worker productivity if activated. The collaboration can only be used with additional investment in training at some future point in time. However, having the ability to capture that benefit has a present value that can be estimated. The flexibility component of TEI captures that value.

Appendix B: Glossary

Discount rate: The interest rate used in cash flow analysis to take into account the time value of money. Although the Federal Reserve Bank sets a discount rate, companies often set a discount rate based on their business and investment environment. Forrester assumes a yearly discount rate of 10% for this analysis. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult their organization to determine the most appropriate discount rate to use in their own environment.

Net present value (NPV): The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made, unless other projects have higher NPVs.

Present value (PV): The present or current value of (discounted) cost and benefit estimates given an interest rate (the discount rate). The PV of costs and benefits feed into the total net present value of cash flows.

Payback period: The breakeven point for an investment, or the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Return on investment (ROI): A measure of a project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits minus costs) by costs.

A Note On Cash Flow Tables

The following is a note on the cash flow tables used in this study (see the Example Table below). The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1. Those costs are not discounted. All other cash flows in Years 1 through 3 are discounted using the discount rate shown in Table 2 at the end of the year. Present value (PV) calculations are calculated for each total cost and benefit estimate. Net present value (NPV) calculations are not calculated until the summary tables and are the sum of the initial investment and the discounted cash flows in each year.

Example Table

Ref.	Category	Calculation	Initial cost	Year 1	Year 2	Year 3	Total

Source: Forrester Research, Inc.

Appendix C: About The Project Team Leaders

Michelle Bishop **Project Director**

Michelle Bishop is a consultant with Forrester's Total Economic Impact™ (TEI) consulting practice. The TEI methodology focuses on measuring and communicating the value of IT and business decisions and solutions as well as providing an ROI business case based on the costs, benefits, risks, and flexibility of investments.

Prior to joining Forrester, Michelle held leadership roles in operations, technology, and marketing in such large organizations as Shell Corporation and Avaya. At Shell, she was a product manager for LPG retail distribution initiatives, as well as project lead for quality and information security at Shell Philippines. While working at Avaya, she led the inventory reduction program and consulted on various after market operations projects. Michelle also came to Forrester with process improvement and account management experience in high-growth startups in media and digital services.

Michelle holds an M.B.A. from the Massachusetts Institute of Technology and a B.S. in industrial engineering from the University of the Philippines.

Michael Speyer **Consultant**

Michael is a consultant for Forrester's Total Economic Impact™ (TEI) service. He specializes in advising clients on the TEI framework and developing methodologies for measuring and communicating the value of technology for product marketing professionals and technology buyers.

Michael was previously Forrester's lead analyst covering small and medium-size businesses (SMBs), IT vendor channel strategies, and managed services. He worked with technology marketing and strategy professionals to understand SMB buyer behavior and develop their SMB go-to-market strategies. His SMB research focuses on IT budgets, technology adoption, spending across a broad range of technologies, and segment analysis. Michael's distribution channels research focuses on channel management strategies, partner management best practices, and evolving channel models. His managed services research focuses on managed services forecasts and buyer behavior.

Prior to joining Forrester, Michael worked at Yankee Group. He was director of the Small and Medium Business Technologies practice, which helped IT vendors and service providers understand the spending, behaviors, and preferences of SMBs. He also served as associate director of the network hardware practice, where he covered both carrier and enterprise network hardware. Michael has also designed and managed IT infrastructures for high-growth companies and worked as a software developer.

Michael holds an M.B.A. from Babson College and B.S.E.E. and M.S.E.E. degrees from the University of the Witwatersrand (South Africa).