A Forrester Total Economic Impact™ Study Prepared For Magento

The Total Economic Impact Of The Magento Enterprise eCommerce Platform

Project Director: Michael Speyer

May 2013

Headquarters | Forrester Research, Inc.
60 Acorn Park Drive, Cambridge, MA 02140 USA
Tel: +1 617.613.6000 | www.forrester.com

Forrester Consulting
Making Leaders Successful Every Day

TABLE OF CONTENTS

Executive Summary

In March 2013, Magento commissioned Forrester Consulting to examine the total economic impact that organizations may realize by using Magento Enterprise for their enterprise eCommerce platform needs. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact that Magento Enterprise may have on their organization.

Magento Enterprise Enables A Scalable eCommerce Platform That Drives Businesses' Growth

Forrester interviewed five merchants for this study. The financial analysis is based on a composite merchant that represents the merchants that we interviewed. The composite merchant has $40 million in online sales and operates both brick-and-mortar stores as well as its eCommerce website. Its prior eCommerce platform lacked the scalability, flexibility, and feature set necessary to support its growing eCommerce needs, which prompted it to adopt Magento's Enterprise eCommerce platform. See Appendix A for a description of the composite merchant.

Overall, we found that Magento Enterprise provided the interviewed merchants with a stable, scalable, flexible platform that contributed to their incremental online revenue growth.

The financial analysis found that the composite merchant experienced the three-year risk-adjusted costs and benefits shown in Table 1.

Table 1

Three Year Risk-Adjusted Financial Impact[1]

ROI	Payback period (months)	Total benefits (present value)	Total costs (present value)	Net present value
159%	5.8	$4,594,156	($1,773,730)	$2,820,426

Source: Forrester Research, Inc.

- **Benefits.** The composite merchant experienced the following three-year risk-adjusted benefits:
  - **eCommerce uplift attributable to the Magento platform of $3,960,893.** The composite merchant experiences an average revenue uplift of 17.3%, equivalent to $19,804,463. Of this, 20% (or $3,960,893) is attributed directly to the Magento platform. We note that the interviewed merchants attributed between 10% and 80% of their revenue uplift to the Magento platform. For the interviewed merchants, revenue uplift was driven by more frequent marketing activities, sales events, and site optimization, which are enabled by Magento's features and scalability.

  - **Costs avoided for prior platform software license maintenance of $147,719.** This is the annual recurring software maintenance expense that is not paid after moving to Magento.

  - **Costs avoided for prior platform maintenance and upgrades of $350,533.** This represents the reduction in labor expense for performing a variety of site management tasks, software upgrades, updates, and code development.

  - **Costs avoided for software development of $135,001.** This savings is captured when merchants purchase extensions for the Magento platform from the Magento Connect extensions store, instead of developing and maintaining homegrown customizations for specific eCommerce needs.

- **Costs.** The composite merchant experienced the following three-year risk-adjusted costs:

  - **Licensing fees for Magento Enterprise totaling $98,206.** This cost is based on operating three production servers and one nonproduction server.

  - **Server hosting and content delivery network expenses of $337,632.** This is the expense associated with hosting services, including bandwidth, server hosting, load balancing, a content delivery network (CDN), and a firewall.

  - **Professional services fees of $861,160.** These are the professional services fees incurred for the initial implementation and ongoing development, maintenance, and upgrades. The initial deployment expense is $324,000, and the ongoing support expense is $537,150. Included in this cost are software acquisition expenses for extensions purchased from the Magento Connect store.

  - **Internal labor costs for integration, maintenance, and upgrades of $476,732.** This is the IT labor used for initial deployment and ongoing maintenance and upgrades to back-end systems.

Factors Affecting Benefits And Costs

Table 1 illustrates the risk-adjusted three-year financial results that may be achieved by a merchant using the Magento Enterprise eCommerce platform. The risk-adjusted values take into account any potential uncertainty or variance that exists in estimating the costs and benefits, which produces more conservative estimates. The following factors may affect the financial results that a merchant may experience:

- Incremental revenues will vary with each merchant's ability to effectively utilize Magento Enterprise's features, its marketing effectiveness, and other activities that stimulate purchasing activity.

- The percentage of total revenue uplift attributable to the Magento platform will also affect the final return on investment (ROI) value.

- Costs avoided for licensing and maintenance fees associated with the prior platform will vary with the type of platform used and the scale of the prior implementation.

- Magento licensing fees will vary with the number of servers and the level of support purchased.

- Professional services fees will vary with the scope, scale, and complexity of the replatforming effort and ongoing maintenance requirements.
- The ability to identify and engage the appropriate systems integrator will affect initial deployment expense and time-to-market.

Disclosures

The reader should be aware of the following:

- The study is commissioned by Magento and delivered by the Forrester Consulting group.
- Forrester makes no assumptions as to the potential ROI that other merchants 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 Magento.
- Magento 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 merchant names for the interviews were provided by Magento.

TEI Framework And Methodology

Introduction

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ framework for those organizations considering implementing the Magento Enterprise eCommerce platform (Magento). The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

Approach And Methodology

Forrester took a multistep approach to evaluate the impact that Magento can have on an organization (see Figure 1). Specifically, we:

- Interviewed representatives from Magento and Forrester analysts to gather data relative to Magento and the marketplace for eCommerce platforms.
- Interviewed five merchants currently using Magento, to obtain data with respect to costs, benefits, and risks.
- Designed a composite organization based on characteristics of the interviewed organizations (see Appendix A).
- Constructed a financial model representative of the interviews using the TEI methodology. The financial model is populated with the cost and benefit data obtained from the interviews.

Figure 1

TEI Approach

Source: Forrester Research, Inc.

Forrester employed four fundamental elements of TEI in modeling the Magento eCommerce platform:

1. Costs.
2. Benefits to the entire organization.
3. Flexibility.
4. Risk.

Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves the purpose of providing a complete picture of the total economic impact of purchase decisions. Please see Appendix B for additional information on the TEI methodology.

Analysis

Interview Highlights

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

1. **A retailer of equipment, tools, and supplies.** In addition to its eCommerce site, the company operates multiple stores throughout the US. The primary purposes of its eCommerce site are to accommodate online sales and to provide product and store information.

2. **An online-only novelty fashion accessories retailer serving the US and EU markets.** The retailer conducts all of its business through its eCommerce site.

3. **An online retailer of high-end furniture and home accessories products.** The retailer operates multiple stores throughout the US and relies on its website to provide production and store information and to support online sales and order management.

4. **A fashion jewelry and accessories merchant that offers collections curated and designed by in-house stylists.** The retailer uses its eCommerce platform to support its network of independent sales agents.

5. **A retailer of luxury apparel, gifts, and accessories.** This retailer uses Magento to power its online factory outlet. It operates multiple retail locations in North America, APAC, and Europe.

The merchants we interviewed had online revenues that ranged from $10 million to $100 million.

Challenges Experienced With The Prior eCommerce Platforms

The merchants we interviewed experienced the following challenges with their prior eCommerce platforms:

- **Downtime and revenue loss triggered by high traffic volumes.** All of the merchants we interviewed experienced growing traffic volumes, driven by organic business growth, marketing activities, and spikes from sales events. In some instances, seasonal demand or sales events caused traffic to increase by five times to 10 times. Their eCommerce platforms' inability to manage these spikes resulted in downtime or revenue loss.

- **Inability to support sophisticated online marketing activities.** Several of the merchants' eCommerce platforms lacked the functionality and flexibility to easily create customized landing pages, support targeted marketing initiatives, or integrate with external marketing agencies. This limited their ability to ramp up lead generation and other marketing activities.

- **Unfavorable economics associated with adding new functionality and updates.** For some merchants, the effort and resources needed to implement new features in their eCommerce platforms to support more sophisticated eCommerce activities were unsustainable. These features ranged from creating short-lived landing pages to integrating with external marketing services providers or with back-office systems. These merchants wanted to implement additional features and extensions in their eCommerce platforms without disrupting their normal business operations and introducing complex multiyear technology efforts.

- **Lack of readily available third-party development resources.** The interviewed merchants found it challenging to find knowledgeable integrators and developers for prior solutions. The scarcity of resources meant higher development and integration expenses as well as uncertainty about the long-term viability of their eCommerce platforms.

New Platform Requirements

The interviewed merchants had the following requirements of their future eCommerce platform:

- **Ability to scale to handle large traffic volumes.** Irrespective of the scale of their businesses, all of the interviewed merchants wanted eCommerce platforms that would scale to meet their growing online traffic volumes.

- **Flexibility to easily and rapidly create custom landing pages and perform catalog updates and other management tasks.** The merchants wanted to easily make changes and updates and perform other day-to-day management tasks using inexpensive internal resources, decreasing their reliance on external providers to perform these tasks.

- **Easy integration with back-office systems and external marketing services providers.** Most of the merchants used external marketing services providers and, in some instances, had existing customer relationship management (CRM) and enterprise resource planning (ERP) systems that would require integration. This drove the need for sufficiently flexible eCommerce platforms that could enable these integrations without incurring too much expense.

- **Rapid deployment.** All of the interviewed merchants wanted relatively quick deployments so that they could begin growing their online businesses. This drove the need for skilled implementation partners that understood their clients' industries and that could satisfy the scope and scale of their deployments.

Qualitative Benefits

After deploying Magento Enterprise, the interviewed merchants experienced a variety of qualitative benefits that were considered to be of high value and contributed to the overall success of their Magento deployments. These benefits include:

- **Scalability and stability to meet traffic volume.** All of the merchants reported that their eCommerce websites scaled to meet business demand without any instability or negative customer experience. This allowed the merchants to increase their marketing activities and hold sales events to drive business growth. In one instance, a company was able to support increases in average daily orders from 2,000 per day to 10,000 per day when sales were held. We note that each merchant's Magento deployment (e.g., number of servers, use of load balancers, bandwidth) was scaled appropriately to handle business volume.

- **Flexibility to enable a broad range of functional requirements.** Each company's deployment had unique requirements in terms of integration with back-end systems (e.g., inventory, order entry, credit card processing), integration with external marketing services providers, enablement of custom business processes, overall look and feel, and how day-to-day management activities were carried out. Magento's extensibility, flexibility, and access to the source code allowed the merchants to control its functionality and adapt the platform to meet their requirements.

- **Rapid time-to-market.** The merchants reported initial deployment times from six to nine months. Many factors contributed to variations in deployment time, like overall project scope, amount of resources used, and scope change.
- **Increased levels of marketing activities.** Magento's ability to integrate with third-party marketing services providers along with the platform's scalability and functionality allowed the merchants to support more diverse and frequent marketing tactics. This was a major contributor to the overall revenue uplift.

Some merchants experienced benefits that were unique to their situations. In one case, a company was able to easily integrate UPS tracking into its website, which reduced its call center volume related to parcel tracking by 75%. Another company that used the Magento platform as an order entry front end for its sale force experienced increased efficiency in its order entry process.

Framework Assumptions

To model the financial impact from using Magento, we developed a composite merchant based on interviews with existing Magento customers.

A summary description of the composite merchant is provided below, with a full description in Appendix A.

- The company has $40 million in online sales. The company operates both brick-and-mortar stores as well as its eCommerce website.
- Its prior eCommerce platform lacked the scalability, flexibility, and feature set necessary to support its eCommerce needs.

The composite merchant had been using the Magento platform for two years. Replatforming from its former eCommerce solution to Magento took six months and was outsourced to an experienced systems integrator. It uses a combination of internal resources and the system integrator for ongoing support, management, and code development.

Table 2 provides model assumptions that Forrester used in this analysis.

Table 2
Model Assumptions

Ref.	Metric	Calculation	Value
A1	Developer fully loaded annual salary		$96,000
A2	QA engineer fully loaded annual salary		$78,000
A3	User experience associate fully loaded annual salary		$54,000

Source: Forrester Research, Inc.

The discount rate used in the present value (PV) and net present value (NPV) calculations is 10%, and the time horizon used for the financial modeling is three years. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult with their respective company's finance department to determine the most appropriate discount rate to use within their own organizations.

Costs

The costs for implementing and maintaining Magento are:

- **Licensing fees for Magento Enterprise.** These fees are based on the number of server licenses required for the Magento deployment.
- **Web, network, and server hosting costs.** These costs include bandwidth, server hosting, load balancing, CDN, firewall, and monitoring.
- **Professional services fees.** These are the consulting fees paid to a systems integrator (an experienced gold-certified Magento partner) for the initial implementation and ongoing support.
- **Labor costs for maintenance and upgrades.** These are the internal labor costs for ongoing support, maintenance, and management of the Magento platform.

Other costs experienced by some customers include expenses associated with purchasing plug-ins and extensions from the Magento Connect extension store and the internal labor costs for deploying the extensions. We have included these costs in the professional services fees.

Licensing Fees For Magento Enterprise

The merchants we interviewed were using Magento Enterprise Edition for their eCommerce platforms. Licensing fees are based on a per-server licensing model. Pricing is $11,970 each for production servers and $3,580 per instance for nonproduction servers.

For the composite merchant, we assume it uses three production servers and one nonproduction server. The total three-year annual licensing costs are $118,470 (see Table 3).

Table 3
Licensing Fees For Magento Enterprise

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
B1	Production server licensing fee (per instance)			$11,970	$11,970	$11,970	
B2	Number of production servers			3	3	3	
B3	Nonproduction server licensing fee (per instance)			$3,580	$3,580	$3,580	
B4	Number of nonproduction servers			1	1	1	
Bt	Licensing fees for Magento Enterprise	(B1*B2)+(B3*B4)	$0	$39,490	$39,490	$39,490	
	Spread		100%	100%	100%	100%	
Bto	Total (original)		$0	($39,490)	($39,490)	($39,490)	($118,470)

Source: Forrester Research, Inc.

Server Hosting And Content Delivery Network Costs

All of the merchants we interviewed used a comprehensive set of hosting services including bandwidth, server hosting, load balancers, firewall, backup, and CDNs. Each customer's hosting expense varied with the mix of services purchased and number of servers that are hosted.

For the composite merchant, we assume that it purchases hosting for three production servers, two database servers, and one nonproduction server. It also incurs charges for bandwidth, load balancing, firewall, monitoring services, and backup. We assume monthly hosting fees of $10,000 in Year 1, which increases by 5% in Years 2 and 3. This yields a three-year hosting expense of $378,300 (see Table 4).

Table 4
Hosting And Content Delivery Network Expense

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
C1	Monthly server hosting, load balancing, content delivery, and firewall expense			$10,000			
C2	Annual increase in hosting expense				5%	5%	
Ct	Annual hosting and content delivery network expense	(C1*12)*(1+C2)	$0	$120,000	$126,000	$132,300	
	Spread		100%	100%	100%	100%	
Cto	Total (original)		$0	($120,000)	($126,000)	($132,300)	($378,300)

Source: Forrester Research, Inc.

Professional Services Fees

All of the merchants we interviewed utilized systems integrators to implement and migrate to their Magento platforms. This is in line with Forrester's own research, where 64% of companies outsource IT associated with eCommerce (see Appendix D). The availability of system integrators overcame a key challenge that the merchants had with their previous platforms — lack of access to external resources. In several cases, Magento was able to recommend an integration partner with experience conducting the type of integration required by the interviewed merchant. Professional services fees experienced by the interviewed merchants varied widely, based on the scope and complexity of the Magneto implementation, and ranged from $50,000 to $1,000,000.

In the case of the composite merchant, we assume that the entire replatforming effort is outsourced to a systems integrator, at a cost of $300,000 for the initial implementation. The initial implementation fees include the purchase and integration of extensions from the Magento Connect store. We also assume that the composite merchant opted to partially rely on outsourced labor as opposed to hiring internal resources for ongoing support, maintenance, and upgrading of the eCommerce platform. The professional services fees associated with this are $200,000 per year. The total professional services fees are $900,000 (see Table 5).

Table 5
Professional Services Fees

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
D1	Initial development and replatforming expense		$300,000				
D2	Ongoing development and support			$200,000	$200,000	$200,000	
Dt	Professional services fees	D1+D2	$300,000	$200,000	$200,000	$200,000	
	Spread		100%	100%	100%	100%	
Dto	Total (original)		($300,000)	($200,000)	($200,000)	($200,000)	($900,000)

Source: Forrester Research, Inc.

Internal Labor Costs For Maintenance And Upgrades

The interviewed merchants adopted different approaches for site maintenance and upgrades. One company relied almost exclusively on outsourcing. Other merchants utilized a mixed model, relying on external resources as well as internal developers, quality assurance (QA) engineers, and junior associates for site maintenance and upgrade tasks.

For the composite merchant, we assume that it uses internal resources in addition to ongoing professional services to maintain its eCommerce platform. The internal resources are primarily used to maintain the integration with various back-end systems and adding functionality when needed. We assume a team consisting of one developer, one QA engineer utilized at 50%, and one user experience associate utilized at 30% to perform maintenance and upgrades. The total internal labor expense is $549,600 (see Table 6).

Table 6
Labor Costs For Maintenance And Upgrades

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
E1	Number of developers		1	1	1	1	
E2	Time allocation per developer		100%	100%	100%	100%	
E3	Developer fully loaded salary	A1	$96,000	$96,000	$96,000	$96,000	
E4	Number of QA engineers		1	1	1	1	
E5	Time allocation per QA engineer		50%	50%	50%	50%	
E6	QA engineer fully loaded salary	A2	$78,000	$78,000	$78,000	$78,000	
E7	Number of user experience associates			1	1	1	
E8	Time allocation per user experience associate			30%	30%	30%	
E9	User experience associate fully loaded salary	A3		$54,000	$54,000	$54,000	
Et	Internal labor expense for maintenance and upgrades	(E1*E2*E3)+(E4*E5*E6)+(E7*E8*E9)	$96,000	$151,200	$151,200	$151,200	
	Spread		100%	100%	100%	100%	
Eto	Total (original)		($96,000)	($151,200)	($151,200)	($151,200)	($549,600)

Source: Forrester Research, Inc.

Summary Of Costs

The total three-year cost to the composite merchant for deploying and maintaining Magento Enterprise is $1,946,370 (see Table 7).

Table 7
Total Costs — Non-Risk-Adjusted

Ref.	Cost category	Initial	Year 1	Year 2	Year 3	Total
Bto	License fees for Magento Enterprise	$0	($39,490)	($39,490)	($39,490)	($118,470)
Cto	Annual hosting and content delivery network expense	$0	($120,000)	($126,000)	($132,300)	($378,300)
Dto	Professional services fees	($300,000)	($200,000)	($200,000)	($200,000)	($900,000)
Eto	Internal labor expense for maintenance and upgrades	($96,000)	($151,200)	($151,200)	($151,200)	($549,600)
	Total costs (original)	($396,000)	($510,690)	($516,690)	($522,990)	($1,946,370)

Source: Forrester Research, Inc.

Benefits

The interviewed merchants experienced a range of financially quantifiable benefits after deploying their eCommerce site on Magento. The following benefits are included in the financial analysis:

- Incremental eCommerce revenues.
- Software licensing fees avoided for previous eCommerce platforms.
- Costs avoided for prior eCommerce platform maintenance.
- Cost avoided for software development and maintenance.

Incremental eCommerce Revenues

According the interviewed merchants, three aspects of Magento contributed to revenue uplift:

- Ability to integrate with external marketing services providers, allowing the merchants to ramp up marketing activities to drive traffic to their websites.
- Flexibility and features to easily deploy custom landing pages to cater for promotions, flash sales, and other marketing efforts.
- Scalability to handle large spikes in traffic generated by marketing activities.

The revenue uplift experienced by the interviewed merchants varied greatly, ranging from 20% to 75%. In one stand-out example, a company went from zero to $100 million in 12 months, but this company had extremely sophisticated eCommerce know-how that it could fully leverage after moving to the Magento platform.

Revenue uplift manifested itself through increased eCommerce conversion rates, average order values, repeat visits, and various other improvements. We note that Magento served as enabler of eCommerce, and the interviewees could attribute a portion of the revenue uplift to the platform directly. This ranged from 20% for the larger, mature merchants to 80% for smaller, fast-growing merchants.

For the composite merchant, we assume eCommerce revenues of $40 million before deploying Magento. After deploying Magento, total eCommerce revenues increase by 15% in Year 1, 17% in Year 2, and 20% in Year 3. This results in incremental eCommerce revenues of $6 million in Year 1, $7.8 million in Year 2, and $10.7 million in Year 3. Assuming that 20% of the incremental revenues are attributable to Magento, the total revenue uplift due to Magento is $4,916,800 (see Table 8).

Table 8

Incremental Revenue Uplift Attributable To Magento

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
F1	Initial eCommerce revenues		$40,000,000				
F2	Percentage revenue uplift			15.0%	17.0%	20.0%	
F3	Annual eCommerce revenues	F1*(1+F2)		$46,000,000	$53,820,000	$64,584,000	
F4	Annual eCommerce revenue uplift	Year(n) - Year(n-1)		$6,000,000	$7,820,000	$10,764,000	
F5	Percentage uplift attributable to the Magento platform			20%	20%	20%	
Ft	eCommerce revenue uplift attributable to the Magento platform	F4*F5		$1,200,000	$1,564,000	$2,152,800	
	Spread			100%	100%	100%	
Fto	Total (original)			$1,200,000	$1,564,000	$2,152,800	$4,916,800

Source: Forrester Research, Inc.

Cost Avoided — License Maintenance Fees

The interviewed merchants eliminated the software license fees associated with their prior eCommerce platforms. These software fees were in the form of recurring annual maintenance fees for perpetual license deployments. The fees varied greatly, depending on the prior platform that was being used, the actual software modules, and scale of the deployment.

We assume that the composite merchant's licensing maintenance fees on its prior platform were $60,000 annually. Eliminating this expense yields a total savings of $180,000 (see Table 9).

Table 9
Cost Avoided — Licensing Fees

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
G1	Recurring software license maintenance fees for prior eCommerce platform			$60,000			
Gt	Cost avoided — software license maintenance fees for prior platform	G1		$60,000	$60,000	$60,000	
	Spread			100%	100%	100%	
Gto	Total (original)			$60,000	$60,000	$60,000	$180,000

Source: Forrester Research, Inc.

Cost Reduction — Platform Maintenance

Some of the merchants that we interviewed experienced relatively high maintenance costs associated with their prior platforms. These costs were driven by a variety of factors including less flexibility and fewer built-in features. The merchants needed to use relatively expensive IT labor to make page changes and perform catalog updates — tasks that could be performed by non-IT labor on other platforms. In addition, IT labor was needed to add functionality to the prior platforms. After moving to Magento, the merchants eliminated some of the IT labor needed to perform maintenance and updates on their prior platforms.

For this analysis, we assume that the composite merchant would need increasing amounts of IT labor to perform low-level maintenance tasks, as the needs of the merchant grew. After moving to Magento, this labor expense is avoided, saving the composite merchant $432,000 over three years (see Table 10). We note that internal labor is still needed to maintain the Magento platform but is used for higher-value projects (as described in the Costs section).

Table 10
Cost Avoided — Platform Maintenance

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
H1	Developer full-time equivalents (FTEs) on prior eCommerce platform			1.0	1.5	2.0	
H2	Developer fully loaded annual salary	A1		$96,000	$96,000	$96,000	
Ht	Cost avoided — platform maintenance and upgrades	H1*H2		$96,000	$144,000	$192,000	
	Spread			100%	100%	100%	
Hto	Total (original)			$96,000	$144,000	$192,000	$432,000

Source: Forrester Research, Inc.

Cost Avoided — Developing Extensions

For many of the merchants that we interviewed, using off-the-shelf extensions was an important benefit, allowing them to easily and cost-effectively meet a range of their eCommerce site needs across a range of categories, including customer experience, site management, integrations, marketing, and utilities. Interviewed merchants reported using between six and 12 extensions each and felt that the availability of easily deployable plug-ins allowed them to avoid significant software development and QA costs. One customer mentioned, “We have saved tens of thousands of dollars for each Magento plug-in. It saves us having to go through the entire coding and QA process each time.”

We assume that the composite merchant purchasing and integrating seven extensions in Year 1, five in Year 2, and four in Year 3 could save $160,000 in software development costs over three years (see Table 11).

Table 11
Cost Avoided — Developing Extensions

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
I1	Assumed development cost per extension			$10,000	$10,000	$10,000	
I2	Number of extensions purchased			7	5	4	
It	Cost avoided — developing extensions	I1*I2		$70,000	$50,000	$40,000	
	Spread			100%	100%	100%	
Ito	Total (original)			$70,000	$50,000	$40,000	$160,000

Source: Forrester Research, Inc.

Summary Of Benefits
The total three-year benefits are $5,688,800 (see Table 12).

Table 12
Total Benefits — Non-Risk-Adjusted

Ref.	Benefit category	Initial	Year 1	Year 2	Year 3	Total
Fto	eCommerce revenue uplift attributable to the Magento platform		$1,200,000	$1,564,000	$2,152,800	$4,916,800
Gto	Cost avoided — software licensing fees for prior platform		$60,000	$60,000	$60,000	$180,000
Hto	Cost avoided — platform maintenance and upgrades		$96,000	$144,000	$192,000	$432,000
Ito	Cost avoided — developing extensions		$70,000	$50,000	$40,000	$160,000
	Total benefits (original)		$1,426,000	$1,818,000	$2,444,800	$5,688,800

Source: Forrester Research, Inc.

Flexibility

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for some future additional investment. This provides an organization with the right or the ability to engage in future initiatives but not the obligation to do so. There are multiple scenarios in which a customer might choose to implement Magento and later realize additional uses and business opportunities. Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix B).

All of the interviewed merchants enabled core features required to make their eCommerce sites functional (e.g., search engine optimization; catalog management; site management; marketing; checking, payment, and shipping; and order tracking) during their Magento deployments. At the same time, they expressed plans to continue to add new features to their sites, such as customer ratings, loyalty programs, and refer-a-friend features, to continue to attract, retain, and leverage upselling/cross-selling opportunities. These added tools represented opportunities for the interviewed merchants to continue to meet the evolving needs of customers.

Risk

Forrester defines two types of risk associated with this analysis: implementation risk and impact risk. Implementation risk is the risk that a proposed investment in Magento may deviate from the original or expected requirements, resulting in higher costs than anticipated. Impact risk refers to the risk that the business or technology needs of the organization may not be met by the investment in Magento, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for cost and benefit estimates.

Quantitatively capturing investment and impact risk by directly adjusting the financial estimates results in more meaningful and accurate estimates and a more accurate projection of the ROI. In general, risks affect costs by raising the original estimates, and they affect benefits by reducing the original estimates. The risk-adjusted numbers should be taken as realistic expectations since they represent the expected values considering risk.

The following implementation risks that affect costs are identified as part of this analysis:

- Annual hosting and CDN expense will vary with the number of servers hosted, bandwidth consumed, as well as use of CDN, load balancing, and other hosting services.
- Professional services fees will vary with the scope and scale of the initial deployment. Ongoing professional services expense will vary with the amount and type of work that is outsourced.
- Internal labor expense for maintenance and upgrades will vary with scope and scale of the eCommerce deployment and the amount of outsourcing that is done.

The following impact risks that affect benefits are identified as part of the analysis:

- Overall eCommerce revenues and amount of uplift attributable to the Magento platform will vary with each company's ability to drive traffic to its websites and the perceived relative role that Magento plays in contributing to revenue uplift.

- Cost avoided for software licensing fees for the prior platform will vary with the type of platform used and the scope of the deployment.

Table 13 shows the values used to adjust for risk and uncertainty in the cost and benefit estimates. 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. Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

Table 13

Cost And Benefit Risk Adjustments

Costs	Low	Most likely	High	Mean
Annual hosting and content delivery network expense	100%	100%	125%	108%
Professional services fees	100%	100%	125%	108%
Internal labor expense for maintenance and upgrades	100%	100%	125%	101%
Benefits	**Low**	**Most likely**	**High**	**Mean**
eCommerce revenues uplift attributable to the Magento platform	92%	100%	105%	99%
Cost avoided — software licensing fees for prior platform	92%	100%	105%	99%

Source: Forrester Research, Inc.

Financial Summary

The financial results calculated in the Costs and Benefits sections can be used to determine the ROI, NPV, and payback period for the organization's investment in Magento Enterprise These are shown in Table 14 below.

Table 14
Cash Flow — Non-Risk-Adjusted

	Cash flow — original estimates					
	Initial	**Year 1**	**Year 2**	**Year 3**	**Total**	**Present value**
Costs	($396,000)	($510,690)	($516,690)	($522,990)	($1,946,370)	($1,680,210)
Benefits		$1,426,000	$1,818,000	$2,444,800	$5,688,800	$4,635,657
Net benefits	($396,000)	$915,310	$1,301,310	$1,921,810	$3,742,430	$2,955,447
ROI	176%					
Payback period (months)	5.2					

Source: Forrester Research, Inc.

Table 15 below shows the risk-adjusted ROI, NPV, and payback period values. These values are determined by applying the risk-adjustment values from Table 13 in the Risk section to the cost and benefits numbers in Tables 7 and 12.

Table 15
Cash Flow — Risk-Adjusted

	Cash flow — risk-adjusted estimates					
	Initial	**Year 1**	**Year 2**	**Year 3**	**Total**	**Present value**
Costs	($420,960)	($537,802)	($544,282)	($551,086)	($2,054,130)	($1,773,730)
Benefits		$1,413,400	$1,801,760	$2,422,672	$5,637,832	$4,594,156
Net benefits	($420,960)	$875,598	$1,257,478	$1,871,586	$3,583,702	$2,820,426
ROI	159%					
Payback period (months)	5.8					

Source: Forrester Research, Inc.

Magento: Overview

Magento is a provider of flexible, scalable eCommerce solutions designed to help businesses grow and succeed online. With more than 150,000 business customers, merchants choose Magento for its solutions that are built on open source technology and that enable businesses of all sizes to control and customize the look and feel, content, and functionality of their online stores.

Magento offers a range of resources, support, and consulting services to help customers get the most from their Magento deployments, including education, training, and developer certification programs. A global community of partners and developers provides access to robust third-party extensions and certified professional integration help.

Appendix A: Composite Organization Description

For this TEI study, Forrester has created a composite merchant to illustrate the quantifiable costs and benefits of implementing Magento Enterprise.

The composite merchant is a company with $40 million in online revenues. It has used the Magento Enterprise platform for two years. The merchant has a team of two IT staff members to write code and maintain the technical aspects of the site. It also has marketing professionals and merchandisers responsible for creating and maintaining site content. It also uses a professional services firm to perform major code implementations and upgrades.

Prior to migrating to Magento Enterprise, the composite merchant experienced the following challenges with its eCommerce platform:

- **Inability to scale to handle large spikes in traffic.** This resulted in instability and downtime, which in turn generated revenue loss and presented an obstacle to future business growth. The merchant was limited in the number of sales and targeted marketing events it could run because of the platform's inability to manage the increase in traffic.

- **Lack of features and flexibility necessary to support more sophisticated and frequent digital marketing efforts.** Specifically, the company wished to engage various third-party agencies to provide services like email marketing and search engine optimization (SEO)/search engine marketing (SEM) and have these services integrated with its eCommerce platform.

- **Inability to quickly make changes to site content, which required the use of skilled IT labor as opposed to relatively less expensive business professionals.** The merchant wished for a more agile platform that could be updated with low-to-mid-level resources.

Appendix B: 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 merchants demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

The TEI methodology consists of four components to evaluate investment value: benefits, costs, risks, and flexibility.

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 form of fully burdened labor, subcontractors, or materials. Costs consider all of 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: 1) the likelihood that the cost and benefit estimates will meet the original projections, and 2) 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 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 PV that can be estimated. The flexibility component of TEI captures that value.

Appendix C: 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, merchants 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 respective 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 at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.

Payback period: The breakeven point for an investment. This is 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 the Framework Assumptions section) at the end of the year. PV calculations are calculated for each total cost and benefit estimate. 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.

Table [Example]
Example Table

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

Source: Forrester Research, Inc.

Appendix D: Supplemental Material

Related Forrester Research

"Trends 2011: Staffing And Hiring For eBusiness," Forrester Research, Inc., January 9, 2012

Appendix E: Endnotes

[1] Forrester risk-adjusts the summary financial metrics to take into account the potential uncertainty of the cost and benefit estimates. For more information on Risk, please see page 20.