The Total Economic Impact Of SAS Customer Intelligence Solutions — Marketing Operations Management
A Case Study Focused On Engaging SAS Marketing Operations Management
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Executive Summary

In August 2013, SAS commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying SAS Marketing Operations Management, a component of SAS Customer Intelligence Solutions. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of SAS Marketing Operations Management on their organizations.

**SAS MARKETING OPERATIONS MANAGEMENT ENABLES COST REDUCTIONS AND MORE EFFICIENT MARKETING OPERATIONS**

Total Economic Impact (TEI) is a standard methodology developed by Forrester Research that captures and quantifies the voice of the customer relative to technology investments. In this study, we interviewed one current SAS Marketing Operations Management customer, a $2B consumer packaged goods (CPG) company. Forrester’s financial analysis shows that the organization experienced significant risk-adjusted ROI, costs, and benefits (see Table 1).

Customer data points to risk-adjusted benefits of $5.07 million versus costs of $1.04 million, adding up to a net present value (NPV) of approximately $4.03 million.

---

**TABLE 1**

<table>
<thead>
<tr>
<th>ROI</th>
<th>Payback period</th>
<th>Total benefits (PV)</th>
<th>Total costs (PV)</th>
<th>Net present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>388%</td>
<td>2.4 months</td>
<td>$5,069,199</td>
<td>($1,039,244)</td>
<td>$4,029,955</td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.
Benefits. The interviewed customer experienced the following benefits:

- **Streamlined marketing operations.** By improving the efficiency of their marketing operations, the organization was able to avoid the cost of hiring eight additional marketing headcount resulting in approximately $1.4 million (risk-adjusted, NPV) in savings over three years.

- **Reduced project costs with reduction of overall marketing waste.** The CPG customer was also able to achieve zero defects in its packaging processes, representing $393,917 (risk-adjusted, NPV) in packaging and printing savings.

- **Cost avoidance of third party imaging costs.** By creating a central repository for marketing images through SAS MOM, the organization saved approximately $3.27M (risk-adjusted, NPV) in third party image processing costs over the three-year analysis.

- Other benefits experienced by the customer but not quantified in the study include increased marketing accountability and improved audit compliance.

Costs. The interviewed customer experienced the following costs:

- **Software license fees.** The organization pays annual fees for use of SAS Marketing Operations Management. Total fees over a three-year period are $689,355 (risk-adjusted, NPV).

- **Internal planning and implementation.** This cost category includes internal labor spent in preparation and deployment of SAS Marketing Operations Management, valued at $137,700 (risk-adjusted, NPV) over three years.

- **Professional fees.** A typical SAS Marketing Operations Management implementation will require professional services for deployment and change management. While these may vary, the professional services fees for the interviewed organization’s implementation have been valued at $210,600 (risk-adjusted, NPV).

- **Training costs.** The organization also spent time on internal training for employees at a cost of $1,589 (risk-adjusted, NPV).

Disclosures

The reader should be aware of the following:

- The study is commissioned by SAS and delivered by Forrester Consulting.

- Forrester makes no assumptions as to the potential return on investment that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in SAS Marketing Operations Management.

- SAS 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 SAS and kept anonymous by customer request to provide more detailed information to the reader.
TEI Framework And Methodology

INTRODUCTION

From the information provided in the interviews, Forrester has constructed a TEI framework for those organizations considering implementation of SAS Marketing Operations Management. 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 SAS Marketing Operations Management can have on an organization (see Figure 1). Specifically, we:

› Interviewed SAS Marketing Operations Management marketing, sales, and consulting personnel, along with Forrester analysts, to gather data relative to SAS Marketing Operations Management and the customer intelligence solutions market in general.

› Interviewed one organization currently using SAS Marketing Operations Management to obtain data with respect to costs, benefits, and risks.

› 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.

Forrester employed four fundamental elements of TEI in modeling SAS Marketing Operations Management service:

› Costs.

› Benefits to the entire organization.

› Flexibility.

› 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.

FIGURE 1
TEI Approach

Source: Forrester Research, Inc.
Analysis

INTERVIEWED CUSTOMER DESCRIPTION
The customer interviewed is a $2B consumer packaged goods company. The customer has the following high-level characteristics:

› $2 billion in annual revenue.
› More than 1,000 SKUs.
› More than 10,000 employees.

This customer implemented SAS Marketing Operations Management for its digital asset management and packaging graphics development workflow. They also use SAS Marketing Operations Management as a routing tool within their promotional and advertising teams, including several agencies that they work with.

INTERVIEW HIGHLIGHTS

_SAS MOM was a huge benefit for the entire organization. We can’t operate without it. It is an end-to-end marketing solution and absolutely critical for our packaging graphics development._

~Manager of creative services, large consumer packaged goods organization

Our interviews uncovered a number of insights about the company’s experience with SAS Marketing Operations Management:

› The decision to engage with SAS Marketing Operations Management was the result of a merger between two companies — one with a defined packaging graphics development workflow and another that had no processes in place. At the same time, the current workflow was using a legacy system of manual processes and the organization wanted to implement one unified, formalized workflow for the marketing organization with a new automated system. The organization observed, “We wanted to be able to download artwork in real time online and eliminate the need for FedEx and all the lost documentation.”

› As the organization evaluated possible solutions, they chose to work with SAS Marketing Operations Management because of SAS’ experience with working with different companies in varying verticals.

› The organization noted that the change management piece of the SAS Marketing Operations Management deployment was a major part of the implementation and required careful planning and thoughtful leadership to champion the project. A number of employees did not want to change over from their old manual process, but the organization did note that those employees came around “once they started using it and they could see they could log in to the system and access work whenever and wherever they needed it.” The organization also added, “While at the beginning, it can seem like a painful process, once they’ve engaged themselves, they want to take it [SAS MOM] with them when they leave the company and go to a new employer.”

› It wasn’t just the customer’s employees who saw the benefits of working with SAS MOM. The manager of creative services also observed, “I still can’t believe there are so many companies there that don’t use a solution like this. All of my agencies tell me all the time that they wish other companies [they work with] have what we have for greater efficiency.” The customer interviewed provides access to the SAS MOM tool to agencies that they work with for their marketing projects.
BENEFITS
The interviewed customer experienced three quantified benefits in this case study:

› Streamlined marketing operations with cost avoidance of additional headcount.
› Lower project costs with reduction of marketing waste.
› Cost avoidance of third-party imaging costs by having the ability to reclaim, reuse, and distribute assets across the enterprise via the use of a central marketing asset repository.

Streamlined Marketing Operations — Cost Avoidance Of Additional Headcount
The customer interviewed observed that with the implementation of SAS Marketing Operations Management, the organization was able to streamline their marketing operations. The process of creating a packaging brief through plant notification now takes 30 days. Prior to their SAS MOM deployment, this process was double or even triple that length of time. The customer interviewed noted that this delay was due to the coordination needed in their pre-SAS MOM manual process, adding, “There were so many different people involved, and, if it [marketing material] sat on someone’s desk for a long time, it was hard to figure out where it was.”

The customer also noted that its SAS MOM implementation has also contributed greatly to improved project management efficiency.

SAS MOM has allowed me to run the packaging production process for a $2B company with only two full-time employees in the electronic workflow.

~Manager of creative services, large consumer packaged goods organization

The customer estimated that without SAS MOM, they would need an additional three headcount to manage and execute the packaging graphics development workflow process.

The organization also gives SAS MOM access to the advertising agencies they work with. This enables closer coordination between the agencies and the various internal groups within the customer for advertising, promotion, and public relations marketing projects. As a result, the organization’s creative services team does not have to hire additional people to manage this process. By moving these responsibilities directly to the agencies, the organization estimates that it has saved five additional headcount.

In total, by streamlining the marketing operations process through SAS Marketing Operations Management, the organization has avoided the cost of hiring eight additional marketing personnel. At an annual fully loaded cost of $75,000 per worker, this has saved the company $1.8 million over three years.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>Cost Avoidance Of Additional Marketing Headcount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ref.</td>
<td>Metric</td>
</tr>
<tr>
<td>A1</td>
<td>Marketing headcount — packaging process</td>
</tr>
<tr>
<td>A2</td>
<td>Project management headcount — agency coordination</td>
</tr>
<tr>
<td>A3</td>
<td>Cost per worker</td>
</tr>
<tr>
<td>At</td>
<td>Cost avoidance of additional headcount</td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.
Reduction Of Marketing Waste — Lower Project Costs

The customer also saw savings in the reduction of marketing waste. "We now have zero defects [in our packaging graphics development workflow process]," the manager for creative services stated. In the previous manual process for printing packaging, the organization would average two incidents a year. While none of these incidents caused a product recall, incorrect packaging was printed and the company had to throw mislabeled packaging and product away and rerun the package and product.

By moving to an automated system through SAS Marketing Operations Management, the organization reduced the number of misprinting incidents to zero per year and consequently reduced marketing waste. At an average cost per incident of $80,000, this has saved the organization $160,000 per year in lower printing costs. Total savings over the three year analysis is equivalent to $480,000.

SAS MOM is solid, stable and runs as a well-oiled machine. We were limping along and now we’re just flying.

~Manager of creative services, large consumer packaged goods organization

<table>
<thead>
<tr>
<th>Metric</th>
<th>Calculation</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1 Average number of incidents per year</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B2 Average cost to remedy defective packaging printing</td>
<td>$80,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bt Reduction in project costs</td>
<td>B1*B2</td>
<td>$160,000</td>
<td>$160,000</td>
<td>$160,000</td>
<td>$480,000</td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.
Cost Savings By Creating A Central Repository For Marketing Assets

The biggest savings that customer interviewed saw with their implementation of SAS Marketing Operations Management came from the reduction in third party image processing costs with the creation of a central repository for their marketing assets.

With SAS MOM, personnel and contractors in the organization could now download images, known as assets, from the system. Apart from the convenience of having a central repository, the organization could now control and ensure that the images being used throughout the company were current and not outdated images.

Without SAS MOM, the organization’s digital assets were managed by agencies and film separators. Agencies would charge the company $150 per image while film separators would charge $50 per image. Each time a digital asset was needed in the marketing process, the organization would have to pay a fee to these third parties. At the time of implementation, the organization was requesting 14,000 images per year from third parties.

To calculate the savings in image processing costs by moving to SAS Marketing Operations Management, Forrester multiplies the 14,000 in image downloads per year by an average cost of $100 per image. This model conservatively assumes that image downloads are divided equally among agencies and film separators. SAS Marketing Operations Management has saved the organization $1.4 million per year in third-party processing fees and over $4.2 million over three years, as shown in Table 4.

### Table 4: Cost Avoidance Of Third-Party Image Processing Costs

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Metric</th>
<th>Calculation</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Number of images requested per year</td>
<td>14,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>C2</td>
<td>Cost per image</td>
<td>$100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ct</td>
<td>Cost avoidance of third-party image processing costs</td>
<td>C1*C2</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
<td>$4,200,000</td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.
**Total Benefits**

Table 5 shows the total of all benefits across the three areas, as well as present values discounted at 10%.

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
<th>Present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost avoidance of additional headcount</td>
<td>$0</td>
<td>$600,000</td>
<td>$600,000</td>
<td>$600,000</td>
<td>$1,800,000</td>
<td>$1,492,111</td>
</tr>
<tr>
<td>Reduction in project costs</td>
<td>$0</td>
<td>$160,000</td>
<td>$160,000</td>
<td>$160,000</td>
<td>$480,000</td>
<td>$397,896</td>
</tr>
<tr>
<td>Cost avoidance of third-party image processing costs</td>
<td>$0</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
<td>$4,200,000</td>
<td>$3,481,593</td>
</tr>
<tr>
<td><strong>Total benefits</strong></td>
<td><strong>$2,160,000</strong></td>
<td><strong>$2,160,000</strong></td>
<td><strong>$2,160,000</strong></td>
<td><strong>$6,480,000</strong></td>
<td><strong>$5,371,600</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.

**UNQUANTIFIED BENEFITS**

Other qualitative benefits cited by the organization interviewed but not quantified in this study include the following:

**Increased Marketing Accountability**

*Accountability is a huge benefit. The [SAS MOM] system allows us to identify users who respond quickly as well as those who do not.*

~Manager of creative services, large consumer packaged goods organization

One benefit of the organization’s implementation of SAS Marketing Operations Management was increased marketing accountability as the organization could now track and review performance with a documented marketing workflow. In its old system, the organization could not track who had document ownership at any one time. With SAS Marketing Operations Management, the organization noted, “We have the login name; we know who signed off on artwork, when they signed off, and how long it took. If you’re a marketing manager and you want something out the door by Thursday — well, now we are now able to identify individuals who are not responding in a timely manner. In the morning, I utilize the report function to identify gaps in response time and push for better performance accordingly.”

**Improved Compliance With Internal Audits**

Another benefit of documented workflows through SAS Marketing Operations Management, as reported by the organization, was the improved compliance with internal audits. “We were able to pass with flying colors,” the organization noted.

This benefit is especially relevant to organizations in industries subject to stringent regulations under such entities as the Food and Drug Administration (FDA) and other consumer protection agencies.
**COSTS**

The interviewed customer experienced four costs associated with SAS Marketing Operations Management:

- Software licensing fees.
- Internal planning and implementation costs.
- Professional fees.
- Training costs.

**Software Licensing Fees**

The organization paid licensing fees for SAS Marketing Operations Management per year based on an on-demand model. The organization licenses SAS Marketing Operations Management for 60 power users and 1,140 consumer users. This license gives the organization access to all the modules contained in SAS Marketing Operations Management. Total license fees paid by the organization are $277,200 per year. Over the three-year analysis, total software licensing fees are valued at $831,600.

Software licensing pricing varies according to the number of power users and consumer users accessing SAS MOM. Readers of this study should consult with their SAS representative to estimate software licensing fees specific to their organizations.

**Internal Planning And Implementation Costs**

The organization estimated that planning and rollout of SAS Marketing Operations Management took six months. One person spent 100% of their time during these six months to drive the project to completion. The customer interviewed emphasized the importance of having a project owner to champion the project to ensure its success. This project champion worked with the SAS implementation team to deploy the solution. As change management was a major part of the implementation, the organization also noted that creating a committee for the rollout of SAS Marketing Operations Management was essential to get buy-in from various sectors in the company affected by the deployment. The customer had 10 people serve on this committee spending 20% of their time through the six-month planning and implementation period.

At an average fully loaded cost per person of $85,000 per year, the total cost of internal planning and implementation is valued at $127,500 as seen in Table 6.

**Professional Fees**

The organization also incurred $195,000 in professional fees for implementation of SAS Marketing Operations Management. This work includes modeling workflows, deploying the Digital Asset Management capability, as well as establishing base reporting and client-specific dashboards.

---

**TABLE 6**

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Metric</th>
<th>Calculation</th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Number of people (committee)</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>Percentage of time spent</td>
<td></td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>Number of people (project lead)</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D4</td>
<td>Percentage of time spent</td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D5</td>
<td>Length of implementation (years)</td>
<td>6 mos/12 mos</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D6</td>
<td>Average cost per worker (per year)</td>
<td></td>
<td>$85,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dt</td>
<td>Internal planning and implementation costs</td>
<td>(((D1\times D2)+(D3\times D4))\times D5\times D6)</td>
<td>$127,500</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.
Professional fees required for implementation may vary widely according to the size of the organization, the size of the implementation, and the degree of process work required. Most organizations implement SAS MOM to drive consistent processes and metrics across their different marketing organizations. Consulting time is typically spent on change management as well as gaining agreement across these different teams to finalize what processes and metrics to implement.

Readers are encouraged to contact SAS to get a tailored quote for professional services required for their SAS Marketing Operations Management deployment.

### Training Costs

The organization estimated that in their SAS MOM deployment, 30 days were spent on training affected employees on an as-needed basis. Three personnel spent about 5% of their time on training. Total training costs incurred, as illustrated in Table 7, was $1,471.

#### Total Costs

Table 8 shows the total of all costs as well as associated present values, discounted at 10%.

### TABLE 7

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Metric</th>
<th>Calculation</th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>Number of workers</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td>Length of training (days)</td>
<td></td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E3</td>
<td>Percentage time spent on training</td>
<td>$85,000/260 days</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E4</td>
<td>Cost per worker (per day)</td>
<td>$85,000/260 days</td>
<td>$326.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Et</td>
<td>Training costs</td>
<td>E1<em>E2</em>E3*E4</td>
<td>$1,471</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.

### TABLE 8

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
<th>Present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software license fees</td>
<td>$0</td>
<td>($277,200)</td>
<td>($277,200)</td>
<td>($277,200)</td>
<td>($831,600)</td>
<td>($689,355)</td>
</tr>
<tr>
<td>Implementation costs</td>
<td>($127,500)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>($127,500)</td>
<td>($127,500)</td>
</tr>
<tr>
<td>Professional fees</td>
<td>($195,000)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>($195,000)</td>
<td>($195,000)</td>
</tr>
<tr>
<td>Training costs</td>
<td>($1,471)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>($1,471)</td>
<td>($1,471)</td>
</tr>
<tr>
<td>Total costs</td>
<td>($323,971)</td>
<td>($277,200)</td>
<td>($277,200)</td>
<td>($277,200)</td>
<td>($1,155,571)</td>
<td>($1,013,327)</td>
</tr>
</tbody>
</table>

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 engage SAS Marketing Operations Management and later realize additional uses and business opportunities. Flexibility would also be quantified when evaluated as part of a specific project (details in Appendix B).

While the customer interviewed did not have any immediate plans to implement other modules within the SAS Marketing Operations Management solution set, it did acknowledge that the availability of other modules within the platform offered opportunity for future expansion and a means to get more benefit from the implementation.

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 SAS Marketing Operations Management 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 SAS Marketing Operations Management, 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:

› Increased complexity of implementation and process workflows requiring increase in internal labor and professional services.

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

› Variability in headcount savings for an organization’s marketing operations team.

› Variability in third-party image processing fees.

› Variability in impact of process workflow defects in the pre-SAS MOM environment.

Table 9 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>
<thead>
<tr>
<th>TABLE 9</th>
<th>Cost And Benefit Risk Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td>Low</td>
</tr>
<tr>
<td>Software licensing fees</td>
<td>100%</td>
</tr>
<tr>
<td>Implementation costs</td>
<td>100%</td>
</tr>
<tr>
<td>Professional fees</td>
<td>100%</td>
</tr>
<tr>
<td>Training costs</td>
<td>100%</td>
</tr>
<tr>
<td>Benefits</td>
<td>Low</td>
</tr>
<tr>
<td>Cost avoidance of additional headcount</td>
<td>80%</td>
</tr>
<tr>
<td>Project cost reduction</td>
<td>92%</td>
</tr>
<tr>
<td>Cost avoidance of third-party costs</td>
<td>80%</td>
</tr>
</tbody>
</table>

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 SAS Marketing Operations Management. These are shown in Table 10 below.

Table 11 below shows the risk-adjusted ROI, NPV, and payback period values. These values are determined by applying the risk-adjustment values from Table 9 in the Risk section to the cost and benefits numbers in Tables 5 and 8.

### TABLE 10
Cash Flow: Non-Risk-Adjusted

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
<th>Present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td>($323,971)</td>
<td>($277,200)</td>
<td>($277,200)</td>
<td>($277,200)</td>
<td>($1,155,571)</td>
<td>($1,013,327)</td>
</tr>
<tr>
<td>Benefits</td>
<td>$0</td>
<td>$2,160,000</td>
<td>$2,160,000</td>
<td>$2,160,000</td>
<td>$6,480,000</td>
<td>$5,371,600</td>
</tr>
<tr>
<td>Net benefits</td>
<td>($323,971)</td>
<td>$1,882,800</td>
<td>$1,882,800</td>
<td>$1,882,800</td>
<td>$5,324,429</td>
<td>$4,358,274</td>
</tr>
<tr>
<td>ROI</td>
<td>430%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payback period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.1 months</td>
<td></td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.

### TABLE 11
Cash Flow: Risk-Adjusted

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
<th>Present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td>($349,889)</td>
<td>($277,200)</td>
<td>($277,200)</td>
<td>($277,200)</td>
<td>($1,181,489)</td>
<td>($1,039,244)</td>
</tr>
<tr>
<td>Benefits</td>
<td>$0</td>
<td>$2,038,400</td>
<td>$2,038,400</td>
<td>$2,038,400</td>
<td>$6,115,200</td>
<td>$5,069,199</td>
</tr>
<tr>
<td>Net benefits</td>
<td>($349,889)</td>
<td>$1,761,200</td>
<td>$1,761,200</td>
<td>$1,761,200</td>
<td>$4,933,711</td>
<td>$4,029,955</td>
</tr>
<tr>
<td>ROI</td>
<td>388%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payback period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.4 months</td>
<td></td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.
SAS Marketing Operations Management Solutions: Overview

According to SAS, SAS Marketing Operations Management provides an integrated marketing platform that streamlines and automates marketing processes and workflows to ensure greater efficiency and effectiveness. The solution includes capabilities for strategic planning and financial management; digital asset distribution and management; marketing performance measurement and analysis; dynamic artwork generation for easy collateral creation; and centralized brand and resource management.

SAS Marketing Operations Management enables marketing departments to improve their process efficiency and demonstrate greater accountability by optimizing marketing operations from end to end—from strategic planning and budgeting, to resource and marketing content management, to global marketing execution and analysis.

SAS Marketing Operations Management is designed for C- and VP-level marketing executives, digital creative users, brand managers, and marketing and campaign planners that are looking to improve and measure marketing effectiveness and track ROI from marketing expenditures.

SAS Marketing Operations Management includes the following solutions:

PLANNING AND FINANCIAL MANAGEMENT

› **Strategic Planning**
  Facilitate collaboration among key stakeholders.

› **Calendars**
  Create, manage, publish, and share marketing information.

› **Offer Management**
  Create, manage, and publish marketing offers efficiently and effectively.

› **Capacity Planning**
  Plan, manage, and allocate marketing team resources more effectively.

› **Timesheets**
  Accurately track the time your marketing team spends on marketing activities.

CREATIVE PRODUCTION MANAGEMENT

› **Marketing Workbench**
  Define and execute workflow processes for successful program execution.

› **Approvals Management**
  Get graphics, videos, and documents reviewed and approved quickly and easily.

MARKETING REPORTING AND ANALYTICS

› **Marketing Dashboard**
  Get a single point of controlled access to relevant marketing information.

› **Reporting**
  Gain clear visibility into every aspect of your marketing operations.

MARKETING FULFILLMENT

› **Artwork Production**
  Simplify the creation of artwork with the use of templates to ensure brand compliance.

› **Site Building**
  Easily build informative websites without having to know HTML.

› **Partner Channel Management**
  Easier collaboration with partners, agencies, and vendors.

MARKETING ASSET MANAGEMENT

› **Digital Asset Management**
  Establish a secure infrastructure for managing your digital assets.

› **Claims Management**
  Create a centralized repository for approved regulatory claims and supporting information.

› **Marketing Knowledge Management**
  Facilitate collaboration while maintaining information security.
Appendix A: Framework Assumptions

TABLE 12 PROVIDES THE MODEL ASSUMPTIONS THAT FORRESTER USED IN THIS ANALYSIS.

The discount rate used in the PV and NPV calculations is 10%, and the time horizon we 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.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Metric</th>
<th>Calculation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>Hours per week</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>X2</td>
<td>Weeks per year</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>X3</td>
<td>Hours per year (M-F, 9-5)</td>
<td></td>
<td>2,080</td>
</tr>
<tr>
<td>X4</td>
<td>Days per year</td>
<td></td>
<td>260</td>
</tr>
<tr>
<td>X5</td>
<td>FTE annual salary</td>
<td></td>
<td>$85,000</td>
</tr>
<tr>
<td>X6</td>
<td>FTE hourly salary</td>
<td></td>
<td>$40.87</td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc.
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 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 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 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 enterprise-wide 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 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, 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 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 net present value of cash flows.

Payback period: The breakeven point for an investment. 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. 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 Framework Assumptions section) 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.