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The Total Economic Impact Of SAS Marketing Automation

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Executive Summary

In April 2007, SAS Institute (SAS) commissioned Forrester Consulting to examine the total economic impact and potential return on investment (ROI) enterprises may realize by deploying SAS Marketing Automation. SAS Marketing Automation provides comprehensive data management, campaign management, and advanced customer analytics to enable marketers and analysts to manage sophisticated, timely, and personalized customer communication strategies and thus increase response rates and revenue. This study illustrates the financial impact of implementing SAS Marketing Automation in the credit/debit cards business, in one European country, for a global retail and commercial bank.

Purpose

The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of SAS Marketing Automation 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 SAS Marketing Automation.

Methodology

SAS selected Forrester for this project because of Forrester's industry expertise in enterprise marketing software, as well as Forrester's understanding of the confluence of technology, data, and analytics and the impact on marketers, and for Forrester's Total Economic ImpactTM (TEI) methodology. TEI not only measures costs and cost reduction (areas that are typically accounted for within IT) but also weighs the enabling value of a technology in increasing the effectiveness of line-of-business activities.

For this study, Forrester employed four fundamental elements of TEI in modeling a financial framework around SAS Marketing Automation:

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

Given the increasing sophistication that enterprises have regarding cost analyses related to IT investments, Forrester's TEI methodology serves a 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 four-step approach for this study:

- 1. Forrester gathered data from existing Forrester research relative to SAS Marketing Automation and the marketing technologies market, in general.
- 2. Forrester interviewed personnel from SAS' Customer Intelligence Global Practice to fully understand the value proposition of SAS Marketing Automation.

- 3. Forrester conducted a series of in-depth interviews with an organization currently using SAS Marketing Automation products.
- 4. Forrester constructed a financial model representative of the interviews. This model can be found in the TEI Framework section below.

Key Findings

Forrester's study yielded several key findings:

- ROI. Based on the interviews with a Marketing Automation customer, a bank's credit/debit
 card division, Forrester constructed a TEI framework with the associated ROI analysis
 illustrating the financial impact areas. As seen in Table 1, the ROI for our composite
 company is 296%, with a breakeven point (payback period) of less than seven months after
 deployment.
- Benefits. The customer organization expects to realize higher levels of profitability by
 optimizing its marketing campaigns for credit and debit cards. The optimization process
 ensures that the best customers are targeted for each individual product improving
 conversion rates and underlying campaign profitability.
- Costs. Cost categories include setup costs (infrastructure and associated implementation costs), ongoing operating costs and Marketing Automation software license and maintenance fees, as well as related hardware acquired to run the platform.

Based on these findings, companies looking to implement Marketing Automation can expect to see increases in the effectiveness of marketing campaigns and overall profit increases. Using the TEI framework, many companies may find the potential for a compelling business case to make such an investment.

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 indepth explanation of risk and risk adjustments used in this study, please see the Risk section.

Table 1: ROI, Original And Risk-Adjusted

Summary Financial Results	Original Estimate	Risk-Adjusted
ROI	387%	296%
Payback period (months)	5.3	6.6
Total costs (PV)	(€3,566,981)	(€3,650,877)
Total benefits (PV)	€17,360,132	€14,466,777
Total (NPV)	€13,793,151	€10,815,900

Source: Forrester Consulting

Disclosures

The reader should be aware of the following:

- The study is commissioned by SAS and delivered by the Forrester Consulting group.
- 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 for the interviews was provided by SAS.
- 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 SAS Marketing Automation.
- This study is not meant to be used as a competitive product analysis.

SAS Marketing Automation: Overview

According to SAS, Marketing Automation supports the entire marketing team and provides improved efficiency and effectiveness at every stage of the marketing process — from setting strategy to targeting opportunities, implementing campaign initiatives, and measuring results.

SAS Marketing Automation helps organizations improve response rates and revenues by providing the ability to easily manage sophisticated, timely, personalized customer communication strategies. Built specifically to meet the needs of key roles in the marketing process — campaign managers, business analysts, quantitative analysts, IT and senior management — SAS Marketing Automation provides comprehensive data management, business intelligence and reporting, campaign management, and advanced customer analytics.

With SAS Marketing Automation, marketing departments can:

- Maintain an integrated customer view. SAS provides a unified view of customers across
 the enterprise, incorporating information from all touchpoints and channels and ensuring
 that customer information is consistent, secure, accurate, and comprehensible to users.
- Manage customer life cycles. Customer segmentation and profiling capabilities consolidate insight at a customer level to build and monitor critical strategic segments over time.
- Improve effectiveness through better targeting, measurements, and analytics. Through advanced analytic techniques such as data mining, market basket analysis, link analysis, forecasting and optimization, as well as segmentation, profiling, and behavior analysis, SAS Marketing Automation helps marketers understand customers' past behavior and predict future opportunities.
- Drive complex communication strategies. Through an intuitive graphical workflow interface and in-depth campaign management functions, business users can efficiently deploy the results of advanced analytics and drive multichannel, multistage communications using reliable customer intelligence.
- Understand and continuously improve the results of marketing activities. SAS
 Marketing Automation allows users to fully understand customer responses, whether those
 responses involve direct communication or subtle changes in behavior. Reports on
 campaign effectiveness combine this response analysis with budget expectations to deliver
 a full picture of the financial return achieved by each marketing initiative and enable
 marketers to refine subsequent activities much more quickly.
- Provide integrated support for all business units. SAS Marketing Automation supports
 the activities of the key marketing campaign participants, including decision-makers,
 business users, database marketers, quantitative analysts, and IT.
- Manage IT infrastructure. Allowing companies to take advantage of their existing IT infrastructure, SAS Marketing Automation is built on technology that can be deployed across the enterprise in a scalable, multitier architecture.

The Total Economic Impact [™] of SAS Marketing Automation

SAS Marketing Automation, part of the SAS Customer Intelligence solutions family, can be extended through integration with other SAS products, providing additional benefit for marketing and other functions within the organization.

Analysis

Developing a TEI model is a multistep process. After reviewing all of Forrester's own relevant syndicated research, Forrester interviewed personnel within SAS' Customer Intelligence Global Practice to learn about the Marketing Automation value proposition. Next, Forrester interviewed the director of marketing analytics from a major global bank that recently implemented Marketing Automation in Spain (and also in several other countries, although those implementations are not included in this study). Forrester used the interview process to understand the distinct costs and benefits that the customer organization saw as a result of its implementation of Marketing Automation. Forrester then constructed a model based on those individual cost and value statements. An annual 10% discount rate was applied to all cash flows to calculate their present values and produce a net present value for the investment. Data provided by the customer allowed Forrester to project a three-year risk-adjusted ROI of 296%. The model makes up the main body of this study and should be used by readers as a guide for determining the ROI for their own organizations.

Interview Highlights

The customer profiled in this case study is a large bank based in Europe, with separate operating units in many countries and a worldwide footprint. The following points illustrate the customer's experience with SAS Marketing Automation, drawn from customer interviews:

- Prior to the implementation of Marketing Automation, the bank had no dedicated campaign management or analytics systems for its cards division in Spain. The cards business previously shared the proprietary campaign platform and contact tools that were created for the bank's retail businesses. No card-specific software and hardware systems existed until Marketing Automation was purchased and installed. "We had no opportunity [prior to implementing Marketing Automation] to develop our whole business model, which is greatly reliant on having continuous contact with our customer," explained the director of Marketing Analytics.
 - Sharing the contact management and analysis platform with retail, the cards business had to use the customer segmentations created for retail. This hampered the cards business from developing and acting on the unique understanding of card customer value, behavior, and socio-demographic factors
 - The cards business had to find time slots for campaigns amid the bank's other priorities, limiting the customer contact opportunities to just several per month or fewer.
 - Implementing Marketing Automation was a major step in advancing the growth of the cards division because it allowed the business to match campaigns and customer outreach for both prospecting and portfolio management (existing customers).
- The cards business is very different from the bank's other lines of business that provide various loans, mortgages, and other retail and commercial financial products.
 - o Consumers use their credit and debit cards daily, producing large flows of data.
 - Consumers carry and use competitors' cards in the same wallet or purse as this bank's credit and debit vehicles.
 - o Processing card data occurs faster than with other banking products.

- With the launch of Marketing Automation, the cards division began to exercise new capabilities, including:
 - Creating 35 to 40 campaigns per month with a staff of only four analysts. Comparable
 activity in other countries requires significantly more staff for business units that do not
 have the benefit of the Marketing Automation implementation for Spain.
 - Conducting analysis that was not previously possible, and gaining greater understanding of customer behavior and value, and increasing customer acquisition, repurchase, retention, and thus revenue.
 - Provide data to the bank's risk management team, who "borrow" data from the cards data warehouse to conduct their own analyses and build risk scoring models.

Marketing Automation In The Bank's Cards Division (Spain)

The cards division implementation of SAS Marketing Automation uses the following components:

- SAS Data Integration Server to build the campaign datamart and migrate data from the current Unix DB2 warehouse.
- SAS Scalable Performance Data Server as the campaign datamart.
- SAS Enterprise Miner for predictive customer analytics.
- SAS Information Map to link data between the datamart and Campaign Studio.
- SAS Campaign Studio to graphically create the campaigns, targeting and tying communications (tracking based on the offer sent, etc.) to specific targets.
- SAS Web Report Studio to view reports and evaluate the results of the campaigns.
- SAS Enterprise Guide to access, manage, transform, analyze, summarize, and report for ad hoc follow-up.
- SAS Web OLAP Viewer for any broader follow-up based on specific variables.
- SAS Management Console to maintain all the uses and privileges.

Note that all of these modules are included as standard components of SAS Marketing Automation.

TEI Framework

Introduction

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

The financial model presented in this study considers a three-year investment by the customer in SAS Marketing Automation software and associated hardware and labor costs, and the resulting gross margin from the overall growth in the cards business over a three-year period.

Framework Assumptions

Table 2 lists the discount rate used in the PV and NPV calculations and the time horizon used for the financial modeling.

Table 2: General Assumptions

Ref.	General assumptions	Value
	Discount rate	9%
	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 finance to determine the most appropriate discount rate to use within their own organizations.

Costs

The key cost categories associated with this Marketing Automation implementation are: 1) hardware; 2) Marketing Automation software and maintenance fee; 3) professional services; and 4) internal labor. The following sections describe the cost inputs to the financial analysis.

Hardware

IBM servers running Unix were purchased for €1.2 million to house the development, test, and production environments for Marketing Automation and the associated datamart.

Software

The standard cost of Marketing Automation software amounted to €990,000 for 5 million records. The maintenance fee of 27% or €267,300 is charged annually, commencing the second year of use.

Professional Services

Implementation assistance from a third party was engaged for a total of €350,000 over the course of six months. The outside team consisted of a project manager and four consultants.

Internal Implementation Labor

Three teams of internal bank staff were assigned to: 1) set up the hardware and install software; 2) develop the data flows and the datamart; and 3) establish the analytics foundation with business rules and user testing and implement the analytics. Full-time equivalent (FTE) effort for these groups amounted to 6.3 FTEs for a period of six months. The total cost of this effort was approximately €155,000 based on an average *fully loaded* (including benefits) annual compensation rate of €49,250 per FTE or 6.3 x €49,250 x.50 years.

Ongoing Management Of Marketing Automation

Ongoing management, maintenance, and execution of the bank's Marketing Automation platform require a staff of four (4) analysts and staff, including Marketing Automation users designated to maintain the system. Their *fully loaded* annual compensation averages €43,500 each for a total annual labor cost of €174,000.

Note: If the compensation rate used in this portion of the model is increased to reflect North American salary levels, i.e., \$95,000 salary and benefits (or €67,500), the ROI in the model is only modestly affected. It remains a robust 272% on a risk-adjusted basis.

Total Costs

Table 3 summarizes the total three-year costs of this Marketing Automation implementation and related expenses.

Table 3: Total Costs

Costs	Initial	Year 1	Year 2	Year 3	Total
Hardware costs	1,200,000				1,200,000
Software license fees	990,000		267,300	267,300	1,524,600
Professional services	350,000				350,000
Planning and implementation labor costs: Analytics team	28,275				28,275
Implementation labor costs: Tech team 1	50,750				50,750
Implementation labor costs: Tech team 2	76,125				76,125
Campaign and analytics team: Spain		174,000	174,000	174,000	522,000
Total	€2,695,150	€174,000	€441,300	€441,300	€3,751,750

Source: Forrester Consulting

Benefits

We now have the opportunity to develop our whole business model, which is strongly reliant on having continuous contact with the customer. The value is huge for us.

Director, Marketing Analytics, Cards Division

The interviewed customer identified the ability to decouple from the analytics infrastructure of the retail units and begin to manage the cards business as a separate and distinct business — and thus realize overall growth of the business — as the key benefit that the organization has realized with Marketing Automation. Another major benefit is the ability to export the business capability to other countries where the bank has card business or would like to expand. This is discussed in greater detail in the Flexibility section below.

Dedicated Analytics And Contact Management Platform

The customer interviewed for this study cited the main benefits of Marketing Automation as nothing less than having the possibility, for the first time in Spain, to market the cards offerings in such a way as to approach the true potential of the business. After installation and testing of Marketing Automation, a process that required approximately six months, the cards unit acquired a powerful platform to accommodate the volume, frequency, and complexity of customer contacts to run the business well. Many of its campaigns are sophisticated, with multistage (at least monthly) contacts. Campaigns seek to prompt, for example, early card activation in the first four months. Analysts are constantly checking on customer behavior to understand it and create follow-up activities to promote desired responses. Marketing Automation has made this and greater levels of sophistication possible.

The bank now executes 35 to 40 campaigns per month, encompassing 450,000 cards per month. This activity level would require many more staff if not for Marketing Automation, and even then the business would suffer from less accuracy, lower levels of contact sophistication, and ultimately a lower level of competitiveness and profitability in a competitive market where all banks offer cards.

The Cards business experienced significant growth in 2006. Much of this growth can be attributed to the implementation of Marketing Automation. The bank is still evaluating the value of the investment, but interviews indicated the value of the SAS product offering at a high level. Forrester worked with the customer's financial results (and disguised these slightly to ensure the customer's anonymity), and determined that the growth in net income of the cards division was 35% over 2005 income levels, an amount of approximately €12.5 million. By conservatively estimating that half of the increase was attributable to the deployment of the dedicated analytics and contact management capabilities of Marketing Automation, the benefit amount would be €6.25 million in Year 1. This equals an increase of approximately €4.00 gross profit per card for 1.5 million cards, although the number of cards was increasing over the time period. Forrester further assigns a conservative compound annual growth rate for the business, applied to Year 2 and 3, of 10%. The Risk section below describes how Forrester treats uncertainty around this estimate.

Users of this study are encouraged to create calculations to answer the question, "What is the minimum level of incremental gross profit that would be required to justify an investment in Marketing Automation?" Forrester believes that many organizations, using models based on the financial framework presented in this study, will determine that the minimum required lift in their business is achievable in a short period, and thus a compelling business case exists for investing in Marketing Automation.

Efficiency And Effectiveness

The customer estimated that without Marketing Automation, headcount would need to be between 5 and 7 FTEs compared with the 4 FTEs currently managing the cards campaigns and analytics. "Without having our own analytics capabilities, explained the bank's director of Analytics, "we were not able to build the types of contact strategies based on, for example, when customers use their card and for what. And of course we did not have information that would help us improve our targeting. This translates into accuracy in who you address in a specific campaign and for what purpose." The bank is now able to use the very precise information that it maintains for cards, including all transaction data, which results in more accurate targeting and greater campaign impact at lower cost.

Total Benefits

Table 4 summarizes the total three-year gross margin benefits of this Marketing Automation implementation.

Table 4: Total Benefits

Benefits	Year 1	Year 2	Year 3	Total
Incremental gross profit	6,250,000	6,875,000	7,562,500	20,687,500
Total	€6,250,000	€6,875,000	€7,562,500	€20,687,500

Source: Forrester Consulting

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 affect 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, in the case of the professional services required to install Marketing Automation, the original assumption of €350,000 used in this analysis can be considered the "most likely" or expected value. Yet this amount will vary based on a number of anticipated factors as well as unforeseen events and discoveries. The variability represents a risk that is captured as part of this study. Forrester assumes that the cost for professional services could be as much as 50% higher than the original estimate, so €525,000 is the "high" estimate. The low estimate is conservatively kept at 100% if the original estimate (indicating that the cost is unlikely to be less than the original estimate). Forrester then creates a triangular distribution to reflect the range of expected benefits, with €409,500 as the mean of €525,000, €350,000, and €350,000 — the high, expected, and low

values, respectively. The risk-adjusted amount is of €409,500 is 17% higher than the original estimate.

The following implementation and impact risks are identified as part of this analysis:

- Installation and testing could demand more days of consulting services and internal staff labor due to:
 - o Challenges in connecting to siloed data.
 - Delays in organizing information to adequately support targeting processes.
 - o Delays in creating a datamart and data model specific to the campaign processes.

Forrester assumes that cost amounts for hardware and software will have been determined by contract, so no risk adjustment is applied.

The following tables show the values used to adjust for uncertainty in cost and benefit estimates. Different cost and benefits estimates have different levels of risk adjustments. For example, Forrester applied a higher risk weighting to technical labor for implementation as compared analytics in part due to the assumption that there is more variability in the implementation estimate. Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

Table 5: Risk Adjustment Factors — Costs

Risk Adjustment: Cost Category	Low	Most likely	High	Mean/risk- adjusted %
Hardware costs	100%	100%	100%	100%
Software license fees	100%	100%	100%	100%
Professional services	100%	100%	150%	117%
Planning and implementation labor costs: Analytics team	100%	100%	125%	110%
Implementation labor costs: Technical team 1	100%	100%	150%	117%
Implementation labor costs: Technical team 2	100%	100%	150%	117%
Campaign and analytics team: Spain	100%	100%	100%	100%

Source: Forrester Consulting

The actual value in these cost areas could be lower than the most likely, expected values. Yet Forrester has made the ROI calculations very conservative, insofar as the low values are typically set equal to the most likely amounts, thus capping "low side bias."

Risk adjustments for benefits reduce the original benefits estimates. Forrester applies a risk range of 50% on the low end of the estimate and 100% on the most likely and 100% again on the high end. This has the effect of reducing the benefit estimate by 17%, equal to 83% of the original value. Thus the most likely (expected) and the high values are €6,250,000, while the low value is €3,125,000 in Year 1 (Years 2 and 3 assume a compound growth rate of 10%).

Table 6: Risk Adjustment — Benefit

Metric	Calculation	Year 1	Year 2	Year 3	Total
Total (Expected)		6,250,000	6,875,000	7,562,500	20,687,500
Total (Low)		3,125,000	3,437,500	3,781,250	10,343,750
Total (High)		6,250,000	6,875,000	7,562,500	20,687,500
Total (Risk-adjusted)	Average (Exp, Low, High)	€5,208,333	€5,729,167	€6,302,083	€17,239,583

Source: Forrester Consulting

Flexibility

Now we have a franchise. We can go to, say, Poland, and know what needs to be done [to implement Marketing Automation for that country]. We can export the function, the capability. Before Marketing Automation, it was not exportable. We would require too many additional staff, and the model would not work.

Director, Marketing Analytics, Cards Division

Flexibility, as defined by Forrester's TEI methodology, is an investment in additional capacity or capability today that can be turned into business benefits 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 Marketing Automation for marketing analytics and campaign management and later realize additional uses and business opportunities. By adding other SAS tools, for example, the customer derives even greater value from the original investment, for other lines of business, perhaps with only modest additional cost.

The Marketing Automation customer in this study identified a number of flexibility options, including the ability to "export" the technology, business process learning, and analytic frameworks developed in Spain to other countries where the bank has cards businesses or to others where it plans to launch new cards lines. Another flexibility option that the organization plans to take advantage of is the ability to share data from the cards datamart with the bank's risk management team and its efforts to meet Basel II requirements. The data assembled for cards can serve multiple purposes and be integrated into the risk management team's analytics platform, which is made easier insofar as that team uses other SAS products. A third area where flexibility options are manifested is in giving business managers access to data about their business lines whereby they are able to query the data stores themselves, "to do their own reporting," without the aid of IT or the cards analytics team. This is a pilot project at the bank in which selected top managers are provided with self-service analysis capabilities.

While Forrester believes organizations can take advantage of these flexibility options, sufficient data inputs were not available at the time of this study. As a result, quantification of the value associated with these options is not included in the analysis.

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.

Tables 7 and 8 show the risk-adjusted values after applying the risk-adjustment method indicated in the Risk section above.

Table 7: Risk-Adjusted Costs

Costs	Initial	Year 1	Year 2	Year 3	Total	Present Value
Hardware costs	1,200,000				1,200,000	1,200,000
Software license fees	990,000		267,300	267,300	1,524,600	1,421,386
Professional services	409,500				409,500	409,500
Planning & implementation labor costs - Analytics Team	31,103				31,103	31,103
Implementation labor costs - Technical team 1	59,378				59,378	59,378
Implementation labor costs - Technical team 2	89,066				89,066	89,066
Campaign & analytics team: Spain		174,000	174,000)	174,000	522,000	440,445
Total	€2,779,046	€174,000	€441,300	€441,300	€3,835,646	€3,650,877

Source: Forrester Consulting

Table 8: Risk-Adjusted Benefits

Benefits: Risk-adjusted	Year 1	Year 2	Year 3	Total	Present value
Incremental gross profit	5,208,333	5,729,167	6,302,083	17,239,583	14,466,777
Total	€5,208,333	€5,729,167	€6,302,083	€17,239,583	€14,466,777

Source: Forrester Consulting

Note that values used throughout the TEI Framework are based on in-depth interviews with one organization and the resulting financial framework built by Forrester. Forrester makes no

The Total Economic Impact [™] of SAS Marketing Automation

assumptions as to the potential return that other organizations will receive within their own environments. Forrester strongly advises that readers use their own estimates within the framework provided in this study to determine the expected financial impact of implementing Marketing Automation.

Study Conclusions

Forrester's in-depth interviews with Marketing Automation's customers yielded several important observations:

- Based on information collected in interviews with a Marketing Automation customer,
 Forrester found that organizations can realize benefits in the form of greater efficiency and effectiveness of the firm's direct marketing activities, which translates into a significant increase in the top-line revenue and profitability of the business.
- Marketing Automation, implemented in one division in one country, can later be leveraged by purchasing additional Marketing Automation software and hardware for businesses in other parts of the organization or in other geographies.
- Marketing Automation offers a data and analytics platform that can provide value to other groups within the organization that are able to borrow data and analytics and plug in their own tools subsequent to the initial marketing automation installation.

The financial analysis provided in this study illustrates the potential way an organization can evaluate the value proposition of Marketing Automation. Based on information collected during indepth customer interviews, Forrester calculated a three-year risk-adjusted ROI of 296% with a payback period of less than seven months. All final estimates are risk-adjusted to incorporate potential uncertainty in the calculation of costs and benefits. Using the TEI framework, many companies may find the potential for a compelling business case to make such an investment.

Table 1: ROI, Original And Risk-Adjusted

Summary Financial Results	Original Estimate	Risk-Adjusted
ROI	387%	296%
Payback period (months)	5.3	6.6
Total costs (PV)	(€3,566,981)	(€3,650,877)
Total benefits (PV)	€17,360,132	€14,466,777
Total (NPV)	€13,793,151	€10,815,900

Source: Forrester Consulting

Users of this study are encouraged to create calculations to answer the questions, "What is the minimum level of incremental gross profit that would be required to justify an investment in Marketing Automation? What is the expected value and what is the highest gross profit increase that can be envisaged?" Forrester believes that many organizations, using a financial framework based on the model presented in this study, will determine that the minimum required lift in their business is achievable in a short period, and thus a compelling business case exists for investing in Marketing Automation.

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 four 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 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 (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 Director

Jeffrey North, Principal Consultant



Jeffrey North is a principal 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 a business case based on the costs, benefits, flexibility, and risk of investments.

Jeff came to Forrester with consulting and operating experience, notably working with fast-growth companies. He was a founding member of the digital strategy practice at Cambridge Technology Partners, where he specialized in business value justification of technology investments and customer advocacy. As a director in the international and catalog business units at

Staples, Jeff built and managed metrics and reporting programs in North America and Europe as the company experienced significant growth. He has also consulted in a business-IT capacity to retailers and life sciences companies.

Jeff holds a B.A. from St. Lawrence University and an M.B.A. with concentrations in international management and finance from the Thunderbird School of Global Management.