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The Total Economic Impact™ Of AvantGard GETPAID

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Executive Summary

In January 2006, SunGard's AvantGard GETPAID commissioned Forrester Consulting to examine the potential return on investment (ROI) companies can realize by deploying its Order-to-Cash solution for managing trade receivables. The study focused on the productivity and financial benefits gained by using AvantGard GETPAID to improve the efficiency and effectiveness of the credit and collections process.

In conducting in-depth interviews with an AvantGard GETPAID client, Forrester found that the company was able to significantly improve the productivity of its credit and collections staff by focusing its efforts in the areas of greatest potential return, improving its ability to manage workflow, automating cumbersome manual tasks, and providing quick access to key information. This improvement in productivity enabled the company to:

- Reduce its "days sales outstanding" (DSOs) freeing up working capital and reducing the associated carrying costs
- Eliminate a large portion of its bad debt expense
- Avoid hiring additional credit and collections staff as revenues doubled

AvantGard GETPAID enabled the client to accomplish this by providing important credit/collections workflow, analysis, collaboration and communication capabilities which addressed some key limitations of the client's ERP system.

Purpose

The purpose of this study is to provide readers with a framework for evaluating the potential financial impact of SunGard's AvantGard GETPAID product 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, develop, and communicate a business case for investing in AvantGard GETPAID.

Methodology

AvantGard GETPAID selected Forrester for this project because of its industry expertise in ERP and financial applications, and Forrester's Total Economic Impact™ (TEI) methodology. TEI not only measures technology costs and cost reductions, it also takes into account the ability of technology to improve the efficiency and effectiveness of the business.

For this study, Forrester employed four fundamental elements of TEI in modeling the financial impact of AvantGard GETPAID.

1. Technology costs
2. Benefits to all areas of the company
3. Flexibility
4. Risk

Given the increasing sophistication of the IT investment analyses being used by enterprises, Forrester's TEI methodology serves an extremely useful purpose by providing a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

Approach

Forrester used a four-step approach for this study:

1. Forrester gathered data from existing Forrester research relevant to AvantGard GETPAID specifically and order-to-cash management in general.

2. Forrester interviewed senior representatives from AvantGard GETPAID to fully understand the potential value proposition of its solutions.

3. Forrester conducted a series of in-depth interviews with a company that is currently using an AvantGard GETPAID solution.

4. Forrester constructed a financial model representative of the client's implementation. This model is described in the TEI Framework section below.

Key Findings

Forrester's study yielded the following key findings:

- The client interviewed for this case study indicated that the return on its investment in AvantGard GETPAID has been excellent due to its ability to improve the efficiency and effectiveness of the credit and collections process.

- The primary quantifiable benefits of implementing AvantGard GETPAID were the reductions in both the costs of working capital and bad debt expense which resulted from the improved productivity of the credit and collections staff. The company also saved money from not having to hire additional credit and collections staff as revenues grew.

- Achieving this level of benefit required very important changes to the organization and processes in addition to deploying the technology. The changes included refining the collections process to take advantage of the capabilities of the solution, implementing different strategies for managing the accounts receivable within various customer segments, and creating a dedicated team of dispute/deduction specialists who could develop and maintain the specialized expertise (e.g., pricing) required for this function.

- The implementation of AvantGard GETPAID required minimal resources from the corporate IS department. This was very important given the many other demands being placed on this group as a result of the rapid growth of the company. The primary need for involving the IS group was implementing regularly scheduled information extracts from the ERP system. AvantGard GETPAID provided an extract program which the client's IS team customized.

- The company has found the post-implementation support provided by AvantGard GETPAID to be excellent.

Disclosures

The reader should be aware of the following:

- The study was commissioned by AvantGard GETPAID and is being delivered by the Forrester Consulting group.
- AvantGard GETPAID reviewed and provided feedback to Forrester, but Forrester maintained editorial control over the study and its findings. Forrester did not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.
- The client names for the interviews were provided by AvantGard GETPAID.
- Forrester makes no assumptions as to the potential ROI that other organizations will receive with AvantGard GETPAID. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in AvantGard GETPAID.
- The study is not meant to be used as a competitive product analysis.

AvantGard GETPAID Solution

Background

Credit and collections departments often lack IT solutions tailored specifically for their needs and continue to rely extensively on very inefficient manual faxed-based processes. While the leading ERP packages provide information and some functionality for credit and collections, this is an area where "best of breed" software vendors often provide some significant added value. As Forrester has noted in its research, applications outside the transactional core tend to favor specialist vendors.[1]

Many credit and collections departments also find themselves reactively dealing with credit "fires" that are frequently very difficult to resolve given the amount of time that has elapsed from the original order date. Managing credit issues on a proactive basis is much more effective for companies as it enables:

- Credit and collections resources to focus on the largest areas of return
- Individual credit issues to be addressed in a timely manner, greatly increasing the likelihood of collecting on overdue payments
- Underlying root causes of credit and collections problems (e.g., pricing confusion, delivery problems, customer issues) to be identified and addressed
- Customer behavior to be modified, as customers realize that the company's tolerance for deductions is greatly reduced.

[1] Market Overview: Financial Management Applications: Expanding Beyond the Accounting Hub – Paul Hamerman, September 15, 2005

Overview

AvantGard GETPAID provides advanced workflow, analysis, and communications capability for improving the efficiency and effectiveness of the management of trade receivables. The key capabilities of AvantGard GETPAID include:

- Generating and managing the workflow of the credit and collections staff based on a prioritization of the customer credit issues that need to be addressed

- Automating credit and collections related customer interactions, using templates to efficiently generate Web, email, and automated fax-based communications

- Facilitating the implementation of specific collections treatment strategies for different customer segments

AvantGard GETPAID is frequently used to extend the financial management capability provided by ERP systems. While the ERP systems are typically the "system of record" for data regarding orders, invoices, and payments, the credit/collections team can often benefit from additional information and functionality. AvantGard GETPAID provides an integrated view of the credit/collections data by tying together customer service, billing, sales, collections, and credit management. It also provides functionality and a user environment that is tailored to the specific needs of the credit and collection function.

TEI Framework

The following section illustrates an example ROI analysis for AvantGard GETPAID, based on the experience of the AvantGard GETPAID client who was interviewed for this report. Since this model examines just one client of AvantGard GETPAID, the calculations and data used should not be seen as a general purpose quantification of the potential return that other organizations may achieve from investing in AvantGard GETPAID. Companies must use their own information to determine their specific potential return.

Description of Organization

The AvantGard GETPAID client interviewed for this study is a large company with $5B in annual revenue and approximately 20,000 employees. In 2001, the company was expanding rapidly due to both acquisitions and general growth in its market. As a result, the finance organization was burdened with a continually increasing credit management workload and the slow deterioration of key financial measures such as its DSOs and bad debt expense. Given that the strategy of the company was to continue its aggressive growth into the foreseeable future in an industry that is known to have challenges with receivables, it was evident that something had to be done.

Business Issues

The company uses an ERP application as its primary financial system. While this system had all of the customer, order, invoice, and payment information needed, it was very cumbersome for the credit and collections staff to use. The key limitations of the ERP system for the credit and collections team at the time were:

- Inadequate tools for managing credit and collections workflow
- Lack of functionality for capturing/managing information regarding customer interactions
- Inefficient user interface – information needed for accomplishing basic tasks had to be drawn from three or four different parts of application (e.g., aging reports, copies of invoices, contact information)

The key credit/collections-related business needs for the company in 2001 were to 1) improve key financial performance measures (e.g., DSOs, bad debt expense, weighted average age of receivables, % starting invoice balance paid), 2) minimize the additions in staff required to support current and expected revenue growth and 3) act as one company to its customers by consolidating the different processes, policies, and tools that were being amassed due to acquisitions.

Evaluation and Implementation

The company evaluated AvantGard GETPAID and a number of other solutions as extensions to its ERP system in early 2001. It selected AvantGard GETPAID based on the functionality it provided and the positive experience of AvantGard GETPAID reference accounts that it spoke with. It implemented the solution in September 2001 for the collections and deductions/disputes team in the US. The US cash applications group was given read-only access to determine potential reasons for short pays. Senior finance management and IT were also given selective access. The collections and disputes/deductions teams use AvantGard GETPAID to prioritize and manage their daily workload. The work to be done each day by each team member is determined by prioritizing the credit issues based on the age/value of the receivable and the risk of a non-payment.

The system has streamlined time consuming tasks such as creating and sending customer communications and capturing and managing information regarding each customer interaction. As an example of the productivity impact, prior to implementing AvantGard GETPAID, sending 100 collections-oriented faxes would take a full day of effort by a resource. With AvantGard GETPAID, sending the same 100 faxes takes 7 minutes. The solution also provides scripts that reduce the learning curve for inexperienced staff.

The client has also made extensive use of AvantGard GETPAID's ability to segment customers based on the strategy to be used to handle collections issues. AvantGard GETPAID is used to assign each customer to one of seven segments defined by the client, and move them between assigned segments as their credit profiles change.

As an example of the different treatment strategies, the client found that if a customer is paying on average in 30 days, there was is no need to speak with them directly until an invoice is outstanding for 90 days. Sending this customer standard email reminders at regular intervals leading up to the 90 day mark works very well and reduces the need to assign resources to this account. Alternatively, if another customer does not normally pay for 90+ days, the client has determined that personal phone calls and visits are the only way to effectively manage the account and focuses its use of resources on the larger most at-risk receivables.

Business Results

The client is very pleased with its investment in AvantGard GETPAID. It has been able to significantly improve both its financial and operational performance, maintaining a staff of eight credit/collections and four dedicated deductions/disputes resources while sales have doubled. Very importantly, it has found that the financial staff spends more time engaged in the value-added work of communicating with customers rather than what had been time consuming tasks of organizing their work, generating information, creating faxes, and reacting to "fires." Employee satisfaction has also improved as AvantGard GETPAID has eliminated a lot of the mundane administrative work while also providing the staff some flexibility in the way that the assigned tasks are executed during the course of the day.

Benefits

SunGard's client benefited from the AvantGard GETPAID implementation by increasing the productivity of its staff as well as improving its financial performance. The specific benefits that have been quantified for the first year the application was used by the client include the following:

- Decreasing the costs of funding working capital by $1.25 million due to the reduction in DSOs by 5 days
- Decreasing bad debt expense by $1 million
- Avoiding $75K in costs of hiring additional staff to support the growth in revenue

During this period deductions have been reduced 98% from 2.2% to .5% of accounts receivable. In addition the weighted average age of receivables, another key financial measure, has dropped 18%. These two improvements, however, have not been included in the calculation below in order to avoid the potential for double counting. These two benefits are, at least in part, captured in the calculations related to reductions in DSO and bad debt expense.

It is important to note that the client experienced other benefits that are not included in this quantitative model, including:

- Significantly less involvement in resolving credit issues by other employees, such as sales people, customer service representatives, and accounts receivable administrators
- Lower processing and transmittal costs by eliminating paper-based processes
- Ability to demonstrate to regulators, such as SOX auditors, comprehensive and accurate information regarding receivables and as a result being able to reduce bad debt reserve

When building the example financial model, the analysis focused on the costs and benefits of the first year of use of AvantGard GETPAID. The assumptions used in the model are outlined in Table 1. The solution has already been deployed by the client in a number of international locations. However, this model deals with the benefits and costs of its first deployment in the US due to the fact that the financial impact of this phase has been better quantified.

Table 1: Assumptions Used in AvantGard GETPAID Financial Analysis

Ref.	Assumptions	Value
A1	Discount Rate	15%
A2	Annual Revenue ($000)	$1,500,000
A3	Number of Days per Year for DSO Calculation	360
A4	Sales Revenue per Day ($000)	$4,167
A5	Decrease in DSOs (days)	5
A6	Decrease in Bad Debt Expense as % of Revenue	0.07%
A7	Carrying Costs for Working Capital	6%
A8	Cost of Credit/Collections Resource ($000)	$75
A9	Growth in Revenue During First Year	12%

Source: Forrester Research, Inc.

The benefits of implementation that have been quantified as part of this exercise are outlined in Table 2:

Table 2: Benefits of Implementing AvantGard GETPAID

		(US$000)	
Ref.		**Year 0**	**Year 1**
B1	Decrease in Days Sales Outstanding		$1,250
B2	Decrease in Bad Debt Expense		$1,000
B3	Hiring Avoided		$75
B4	Total	0	$2,325

Source: Forrester Research, Inc.

Decrease in Days Sales Outstanding

Days Sales Outstanding is a metric used by finance organizations to assess the amount of money owed to their companies by customers. It is calculated by dividing the total outstanding invoices from sales (i.e., accounts receivable) by the number of days in the year. It is an important measure due to the fact that money that is tied up in accounts receivable is not available to the company for other purposes, such as paying down debt or making investments. A decrease in DSOs reduces the amount of working capital that must be used to fund accounts receivable, and therefore the cost of funding that working capital.

To calculate the impact of the reduction in DSOs for the case study, the annual U.S. revenue for this AvantGard GETPAID client is assumed to be $1.5B (reference A2), or $4,167,000 per day (reference A4). The client was able to reduce DSOs by 5 days in the first year. The resultant savings of $1,250,000 (reference B1) is calculated by multiplying the revenue per day times the number of DSO days reduced times the assumed 6% cost of working capital (reference A7).

Decrease in Bad Debt Expense

The reduction in bad debt expense has a direct impact on profitability. It is the amount of money that is set aside within the profit & loss statement to cover the costs of receivables that have to be written off when they are no longer considered to be collectable. This metric is usually expressed as a percentage of annual sales.

By being more effective at identifying and proactively addressing potential credit issues, the AvantGard GETPAID client was able to reduce bad debt expense by .07% of annual revenue during the first year (reference A6), resulting in a savings of $1,000,000 (reference B2).

Avoiding Costs of Hiring Additional Staff

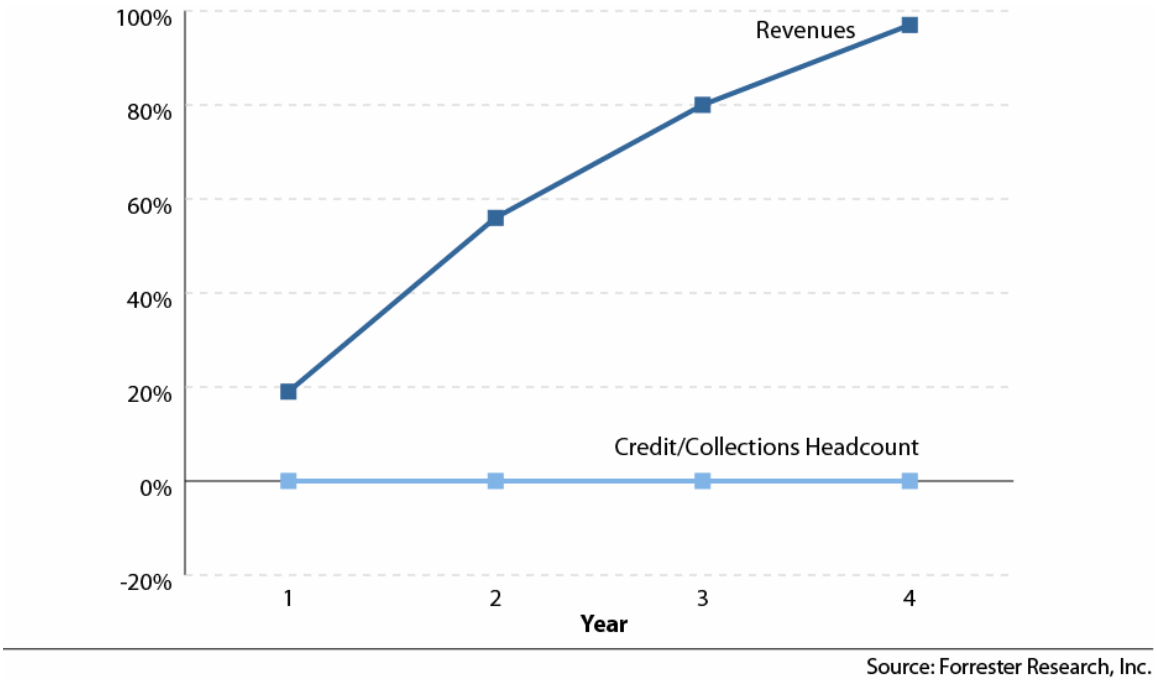
If it had maintained its current processes and IT systems, the client states that it would have had to grow credit and collections headcount linearly with sales revenue. Since revenue increased 12% during that first year, this would have conservatively led to an increase of one headcount among the combined team of twelve credit/collections and dispute/deduction personnel. Since the fully loaded cost of one of these resources is $75,000 (reference A8), the estimated savings is $75,000 (reference B3).

By summing the business impact of these three factors, the total savings resulting from the use of AvantGard GETPAID, and the related changes to personnel and processes, during this first year was $2,325,000 (reference B4).

This benefits described above were for the first year of implementation. The client interviewed has gained substantial benefit from the solution in each of the four years that it has used it. As illustrated in Chart 1, the significant improvements in productivity enabled credit and collections headcount to remain flat as sales increased by 97% (all percentages are expressed as the total change relative to Year 0 – which is 2001).

Chart 1: Percent Change in US Headcount Relative to US Sales

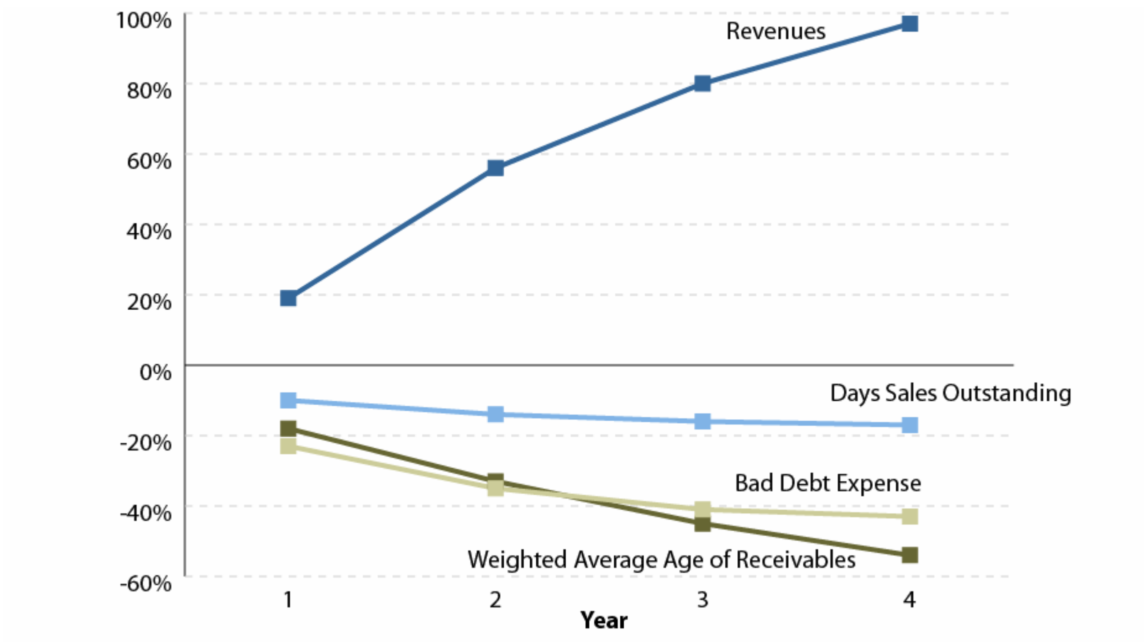
(Total Percent Change since Year 0)



As illustrated in Chart 2, the key financial measures noted above also continued to improve as sales increased.

Chart 2: Percent Change in Key US Financial Metrics Relative to US Sales

(Total Percent Change since Year 0)



Source: Forrester Research, Inc.

Costs

A very comprehensive review of IT costs is undertaken with the TEI methodology, to determine the total investment required to achieve the benefits outlined in the previous section. This includes all incremental investments in hardware and software, the internal and external resources used, and any training needed for the IT staff. The costs are summarized in Table 3:

Table 3: Costs of Implementing AvantGard GETPAID

		(US$000)	
Ref.		**Year 0**	**Year 1**
C1	GETPAID Software Licenses	$195	
C2	GETPAID Software Maintenance Fees	$35	$35
C3	Consulting Services and Training	$70	
C4	Hardware	$25	
C5	Internal Labor Expenses	$10	
C6	Total	$335	$35

Source: Forrester Research, Inc.

The pricing for the client's US deployment of the AvantGard GETPAID solution in 2001 was $195,000 (reference C1). The annual maintenance for the software is $35,000 per year (reference C2). The additional cost of the related consulting services and training was $70,000 (reference C3). The client also purchased a server that cost $25,000 (reference C4).

The cost of the internal effort required by the client to implement the solution was estimated to be $10,000 (reference C5). The primary person involved was the credit/collections process manager who became the AvantGard GETPAID administrator. She worked with the AvantGard GETPAID implementation team to design and implement the new processes, configure the software, and be trained on running the solution. The other expenses included minimal involvement of the IS staff and time spent learning the system by the rest of the users. The total elapsed time to implement the solution, from time it was ordered to the point where the team was using the system was 4 months.

Risks

A key component of the TEI process is factoring in the inherent uncertainty involved in estimating the expected costs and benefits of a technology project. This uncertainty results from numerous potential risk factors related to the vendors and products involved, the architecture being used, the culture of the organization, the impact of potential project delays, and the sheer size of the project. A full TEI analysis of a specific project would quantify this risk using ranges for each cost and benefit. The range is entered in the form of a low estimate, a most likely value, and a high estimate.

Since this study is dealing with the actual costs and benefits of an existing implementation, uncertainty is not factored into the calculations. However, for those estimating expected costs and benefits, the following potential impacts should be taken into consideration:

- The effectiveness of the organization in making the necessary changes to people and processes. The AvantGard GETPAID system is a critical part of the solution, but the full benefits will not be realized via the use of new technology alone. In the case of the SunGard client interviewed, the collection process had to be modified to take advantage of the workflow management capabilities of the solution. A dedicated team of resources was assembled for handling disputes and deductions due to the learning curve involved with handling complex issues such as pricing. In addition, the customer base had to be segmented and different treatment strategies had to be defined and implemented. The metrics used to assess the performance of the credit and collections personnel also had to be modified to focus on the value of credit issues resolved, versus the raw quantity of work being done.

- The time and effort needed to implement regular extracts of the necessary information from the required system or systems. While this is generally a small investment given the tools and APIs that are available from AvantGard GETPAID, it can be a source of additional time and investment.

Flexibility

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could, for some future additional investment, be turned into business benefit. Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A). For this study, the potential options for flexibility are identified and described qualitatively.

Flexibility options with AvantGard GETPAID for this client include the following:

- Expanding its use into other areas of collaborative financial management such as credit risk management in which customer credit limits are monitored and adjusted as needed. The AvantGard GETPAID client is planning to implement this capability in the near future in order to generate and manage the workflow of the credit/collections resources that handle this work while also improving their ability to manage their exposure to parent/child credit risk (i.e., exposure when providing credit to organizations that are part of the same overall corporate entity). The latter is important for maintaining compliance with SOX regulations.

- Leveraging the solution in other geographic regions. The AvantGard GETPAID client plans to continue to expand its use of the solution in other geographic areas such Europe, Asia, Canada, Latin America, Australia, and the Middle East. All of these implementations present their own challenges due to differences in regulations, currency, and culture.

AvantGard GETPAID can also be used to consolidate trade receivables data from multiple instances of an ERP system or across multiple ERP applications, reducing the cost of managing this data while enabling an integrated view. This particular client was using a single instance of its ERP system and therefore did not use this capability. It would be an option for other companies that are dealing with multiple sets of trade receivables data (e.g., resulting from acquisitions).

Summary of TEI Analysis

In order to calculate the financial return of the investment in AvantGard GETPAID, the present value of the benefit and cost cash flows are calculated, using the assumed discount factor of 15% to reflect the time value of money. The present value of the total benefits of $2,325,000 (reference B4) is $2,021,739 (reference S1). The present value of the costs is $365,435 (reference S2), after applying the discount factor to the Year 1 cost of $35,000 and adding it to the Year 0 cost of $335,000.

The present value of the costs is subtracted from the present value of the benefits to derive the net present value (NPV) of $1,656,304 (reference S3). The NPV is then divided into the present value of the costs to calculate the Return on Investment (ROI) of 453% (reference S4).

The Payback Period is the time required for the discounted stream of total monthly benefits to equal the discounted stream of total monthly costs. For the AvantGard GETPAID client interviewed, this occurred in sometime under 6 months when the new process matured to the point of covering the investment of $335K with the reduction in DSOs and bad debt expense. These results are listed in the table below:

Table 4: Summary of Financial Calculations

	Category	Value
S1	Present Value of Benefits	$2,021,739
S2	Present Value of Costs	$365,435
S3	Net Present Value	$1,656,304
S4	Return on Investment	453%
S5	Payback Period	Under 6 months

Source: Forrester Research, Inc.

As with any analysis of a potential investment, these values should be considered in combination. The NPV provides insight into the overall magnitude of the expected return. The payback period indicates the expected amount of time before the net returns from the use of AvantGard GETPAID first exceed the investment in the solution. The ROI shows what the expected return would be, in percentage terms, relative to the upfront investment.

Study Conclusions

The client interviewed for this case study is extremely pleased with the overall return on its investment in AvantGard GETPAID's solution, and the associated changes that it made to its financial organization and collections processes. As a result of these collective actions, it was able to improve on its key financial performance measures while also holding credit/collections headcount steady as revenues doubled. It achieved full payback for the investment within the first 6 months, and has seen continued improvements in key credit/collections financial measures and productivity over the four years that it has used the AvantGard GETPAID.

The primary quantifiable benefit resulted from the improvement in credit-related financial measures such as DSOs and bad debt expense, increasing profitability for the company by over $2M in the first year. This initiative also improved the productivity of other employees that are involved in resolving credit and collections issues (e.g., sales, customer service, A/R), reduced processing costs, increased employee satisfaction, and improved the ability of the company to comply with SOX requirements.

The client's initial implementation in the United States provided a good platform for what eventually will be a global solution addressing the full range of credit management needs. While the initial decision to use AvantGard GETPAID was made back in 2001, the company's satisfaction with the solution and the capability that it provides has resulted in its plan to expand its use to Europe, Asia, Canada, Latin America, Australia, and the Middle East. It also plans to use AvantGard GETPAID to automate and improve its processes for managing credit exposure.

Appendix A: Total Economic Impact™ Overview

Total Economic Impact is a methodology developed by Forrester Research, Inc. 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, cost, flexibility, and risk.

Benefits

Benefits represent the value delivered to the user-organization – IT and/or business units – by the proposed product or project. Oftentimes product or project justification exercises focus just on IT cost and cost reduction, leaving little room for analysis of the impact of the technology to the entire organization. The TEI methodology and resulting financial model place equal weight of the measure of benefits to that of costs, allowing for a full examination of the impact of the technology on the entire organization. Calculation of benefits 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 benefits estimates after the project has been completed. This ensures that benefits 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. These may be in the form of fully burdened labor, subcontractors, or materials. Costs consider all the investments and expenses necessary to deliver the value proposed. In addition, the costs category within TEI captures any incremental costs over the existing environment due to ongoing costs associated with the solution. All costs must be tied to the benefits that are created.

Flexibility

Within the TEI methodology, direct benefits represent one part of the investment value. While direct benefits typically can 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. An embedded collaboration feature may translate to greater worker productivity if it is activated. Having the ability to capture that benefit has a present value that can be estimated. The flexibility component of TEI captures that value.

Risk

Risk is the fourth component of the TEI methodology. Risk is a measurement of the uncertainty to benefits and costs estimates contained within the investment. Uncertainty is measured in two ways: the likelihood that the costs and benefits estimates will meet the original projections, as well as 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 estimate. The expected value — the mean of the distribution — is used as the risk-adjusted cost or benefit number. The risk-adjusted costs and benefits are then summed to yield a complete risk-adjusted summary and ROI.

Appendix B: Glossary

Discount rate: The interest rate used in cash flow analysis to take into account the time value of money.

Present value/net present value (NPV): The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). Present value often refers to individual cost and benefit cash flows and NPV is the sum of the present values. A positive NPV normally indicates that the investment should be made, unless other projects have higher NPVs.

Payback period: The breakeven point for an investment. The point in time at which net benefits (benefits minus costs) equal initial investment or cost. Other things being equal, the better investment is usually the one with the shorter payback period. The example below illustrates the concept:

Payback Period = A + (B / C) where:

- A = Last year in which the net cash flow is negative = Year 1
- B = The absolute value of the net cash flow of A = Year 1 = 30
- C = The yearly net cash in the year following A = Year 2 = 90
- Payback period = 1 + (30/90) = 1.3 years (or about 16 months)

	Initial	Year 1	Year 2	Year 3	Year 4
Total Costs	(100)	(10)	(10)	(10)	(10)
Total Benefits		80	100	100	100
Yearly Net Cash (Total Benefits – Total Costs)	(100)	70	90	90	90
Net Cash Flow (Net Cash Flow in Previous Year + Yearly Net Cash)	(100)	(30)	60	150	240

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