This white paper provides an overview of the issues related to calculating return on investment (ROI) for knowledge management (KM) initiatives in the call center and help desk environments. It includes the necessary information needed to create a plan for introducing KM into the enterprise. We will examine key questions such as “Who is Responsible for ROI within your organization?” and “What are the key metrics for measuring ROI?” – “When will you start to see the benefits and how much return can you expect?” and – although it seems obvious – “What are the reasons for taking the time to conduct a thorough ROI—not just a quick calculation on an online ROI calculator?” Finally, we will review ServiceWare’s approach to ROI and explore the results and benefits that our customers have realized by implementing KM.

"ServiceWare's knowledge management solutions have ultimately reduced our support costs and impacted our company's bottom line."

Karen Lound,
Customer Support Manager, Fourth Shift
a SoftBrands Company
An insider’s guide to knowledge management ROI

Due to the macroeconomic climate, IT projects today get more scrutiny than in previous times. Accordingly, more people are involved in the selection of a solution and its implementation into the enterprise. Of course, a successful initiative should be in line with corporate and departmental goals. Therefore, not only are IT executives involved in buying decisions, but call center and help desk managers, users and even financial executives play a role in the selection and implementation of IT projects. And, while each party mentioned above might not have a Management Objective associated with a knowledge management initiative—they do play a role in determining if it will be successful or not.

The bottom line is, just like everyone in the company needs to be fiscally responsible, managing the company’s intellectual assets is everyone’s responsibility.

How can my company be sure to achieve a substantial ROI on knowledge management?

Organizations can achieve a return on their KM investments by applying a systemic approach to evaluating needs, opportunities, and organizational commitment levels—and then establishing realistic and achievable goals, and adopting a methodology to consistently measure baseline metrics against projected goals. Finally organizations will need to document actual improvements. It is important to note that KM vendors should have a proven methodology to assist in this preparation and financial analysis. The following topics will explain how KM ROI is measured, and what results can typically be expected.

Why take the time to accurately calculate ROI?

A knowledge management initiative takes time, money and commitment - ongoing measurement of the program’s achievements will show that it can pay for itself and even start driving revenue to the company. These reasons create a compelling case for measuring ROI:

- Benchmarking metrics establishes a baseline
- Set expectations (an often ignored step in IT projects)
- Gain management acceptance
- Create a repeatable model for measuring success
- Recognize true ROI

Basic project management practices mandate that organizations take these steps. Whether your KM vendor provides guidance, or you decide to measure ROI alone, it is important to go through these processes to ensure you’ve done your due diligence regarding your baseline measurements and what improvements are possible in your situation. This process assists you in setting appropriate expectations, gaining management support, and setting the stage to recognize a true ROI in your company.

There are three basic types of improvements: Efficiency,
Effectiveness, and Innovation. Support organizations may be able to achieve results in some or all areas depending on current needs and opportunities. Some of the specific metrics for measurement can offer cost reductions in the following areas:

**Efficiency**
- Decreasing average handle time
- Minimizing talk time
- Redeploying FTE (Full-Time Equivalent) Resources
- Reducing after-call work
- Reducing “other” (or unaccounted for) time

**Effectiveness**
- Increasing first call resolution rates
- Shrinking call escalation percentages
- Reducing repeat calls
- Reducing employee turnover
- Reducing agent training time

**Innovation**
- Providing self-service for users on the Web
- Rerouting calls to e-mail or chat
- Creating sales via cross-sell and up-sell opportunities
- Increasing customer satisfaction
- Decreasing customer churn

There may also be other opportunities that are unique to your business. Determining what improvements are best exploited in your call center or help desk requires in-depth knowledge of your workplace processes, people, culture, legacy systems, and your customers.

It is important to determine where you are now, what types of improvements are possible, and what the limiting factors are that could prevent you from seeing normal improvement levels in some or all of the typical metrics. This is why general “ROI Calculators” are of very limited use to most corporations today. They take a narrow snapshot of your business with little or no context, and try to apply broad generalizations against complex environments without taking company-specific conditions into consideration. These static tools are unable to effectively capture the complex dimensions of a given business (e.g., customer preferences and product footprint), much less track their changes over time and suggest strategies to adjust behavior.

These ROI calculators typically ask a few questions, such as number of calls, number of people, cost per call, and then apply a standard improvement against these base metrics (which are usually not at all conservative). Calculators often fall short because they don’t ask things like “what are your business rules, how do you interact with your customers, and why are today’s performance metrics at the levels they are now?” They don’t tailor the output of their solution to the unique characteristics of each company’s complex situation.

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**What you don't measure, you can't manage**

“Process orientation drives intensive number gathering in enterprises. However, it is important to find the right key performance indicators. For example, there is little value in counting the number of calls answered by a call center. Instead, the number of calls with first-call resolution should be counted. Normally, numbers in categories like time, cost, and quality are collected and summarized. To achieve real improvements, it is necessary to maintain links between the gathered numbers to the original processes.”

Ruediger Spies Meta Group, “Metabits” October 14, 2002
How to accurately measure ROI

ServiceWare recommends starting with a good baseline assessment of your current and/or historical performance measurements. How often you choose to measure is a function of what information is available and whether or not the time frame you are considering is subject to cyclical variations—such as seasonality. You should also establish regular reviews to identify improvement opportunities and enhance ROI metrics.

Whatever the sources, it is important to identify and document the methodology for gathering the information, because definitions and calculations can change over time. You may start realizing a return upon implementation of a KM solution, but you will not have a complete understanding of the true value without instituting an effective analytical approach.

To measure the benefits of KM you will need to look at the total environment and obtain metrics from various sources including:

- CRM System: FCR, Repeat Calls, Handle Times
- ACD System: Escalations, Talk Times, "Other" Time
- KM Solution/ServiceWare: Call Deflection, Knowledge Metrics, Productivity
- Reporting Packages: Analytics, Trend Analysis
- Customer Satisfaction Surveys: Primary Customer Research
- CSR Focus Groups: Secondary Customer Research

When can a return from knowledge management be realized?

Many organizations begin to see improvements almost immediately after implementing a KM solution. For example, short run ROI is possible simply by creating a centralized knowledge base of accurate customer service and support knowledge. This positively leverages human capital and eliminates redundant work by call center and help desk agents. Most companies see significant improvements after just a few months and the majority of customers experience a break-even or payback between 9 and 15 months.

It is important to begin measuring immediately after implementation to manage by performance. Early on you may want to look at weekly reports, and later on drop back to monthly reviews. As opposed to projected ROI, true ROI can only be measured after the implementation has been in place for a period of time and the organization is actively using the solution.

How quickly can self-service have an effect on call volumes?

Budgets are not increasing, but support demands are still growing. Managers must find innovative ways to deal with these restrictions, and knowledge-enabled self-service is one of the most powerful tools available to companies today. Plus, people are becoming increasingly willing to use self-service for many transactions - including online customer service and support. For example, Wonderware, a vendor of industrial automation software, achieved a 34% reduction in calls just nine weeks after implementing ServiceWare for Web self-service.

How does knowledge management improve first call resolution?

Without a knowledge base, agents are answering customer and employee questions from memory, asking other agents for answers or even searching through information from manuals or sticky notes. These methods provide very little version or quality control. By providing agents with a robust knowledge base, they have quick access to accurate, approved answers and the ability to solve customer and employee questions during the initial contact. This assures quality service and consistency in the call center or help desk.
How does knowledge management affect employee-training time?

A properly deployed KM solution puts information at the agent’s fingertips, allowing the new agent to find accurate answers quickly. This not only cuts down on the amount of time needed for formal training, it also empowers the agent to solve problems with more confidence, and frees up time that might otherwise be spent asking questions of busy more experienced agents. The overall result is a win-win situation where the company saves money while insuring greater job satisfaction for the agents.

What degree of return can be expected from knowledge management?

Of course the answer depends on your center’s current situation, but it is possible to see returns worth millions of dollars. Organizations realize these returns through reduced support costs that come from improvements in performance metrics. The following are typical metrics that can be expected from KMI, with the average ServiceWare customer improvements in parentheses:

- Increasing First Call Resolution (55%)
- Reducing Escalations (30%)
- Shortening Handle Times (40%)
- Call Deflection to Self-service (28%)
- Reducing Training Time (30%)

Take the First Call Resolution Challenge

If you are unsatisfied or unsure of your current level of first call resolution try a quick experiment. Think of a common issue that you would expect most agents to be able to handle on a regular basis with no assistance. Place 10 or 20 calls, (pretending to be a customer), into the help desk or call center and keep a log to record the results.

- Did you get to the right answer each time?
- Did the agents troubleshoot using the same (or acceptable) methodical approaches?
- Did they get to the root cause in a timely manner?
- Was the same and/or correct solution offered each time?
- How many times were you transferred, escalated, or the call resulted in follow on work?

"The biggest benefit of working with ServiceWare’s team was that they did the legwork and calculations for us when we didn’t have the resources to do the analysis on our own."

Karen Lound, Customer Support Manager FourthShift, A SoftBrands Company
An ROI Example

To best explain how ServiceWare calculates the ROI for our solutions, we’ve developed a scenario based on a financial services company whose goal is to improve overall service levels and call center metrics by implementing ServiceWare’s solutions. The current situation, outlined below, shows that Secure Financials, Inc. (a fictitious company name used to protect the privacy of ServiceWare’s clients) has a total of 110 agents supporting their banking customers. They currently field customer inquiries via the phone and e-mail. They do not have a Web self-service knowledge base or any formal knowledge sharing solutions in place. The company’s objectives include improving overall service levels by increasing first call resolution rates, decreasing costly escalations, and deflecting calls and e-mails to Web self-service.

**Current Situation:**
- 100 level 1 agents ($25k fully burdened), 30% turnover
- 10 level 2 agents ($35k fully burdened), 20% turnover
- 65% first call resolution
- 20% escalation rate
- 7 minute average talk times
- No customer self-service on the Web
- 5% of contacts are handled via email
- 30 days training
- Inconsistent answers to customers
- No effective knowledge harvesting
- No formal knowledge sharing
- 10% annual growth in contacts

**Objectives:**
- Improve overall service levels
- Increase first call resolution
- Decrease escalations
- Deflect appropriate calls to self-service
- Provide consistently accurate answers
- Reduce training and ramp-up times
- Decrease employee turnover

**Do Nothing Scenario:**
- 3 Year Total Support Cost $11,800,000
- Cost Per Contact $3.02

**Implement ServiceWare Scenario:**
- 3 Year Total Support Cost $9,400,000
- Cost Per Contact $2.43

**Total Savings:**
- 3 Year Total Savings $2,400,000
- Cost Per Contact $0.59
- Break Even Month 10

**Results**
- Improved productivity
- Fast access to accurate answers
- Reduced operating budget
- 3 year savings over $2,000,000
- Average cost per contact lowered 35%
- Improved service levels without increasing staff
- 24 x 7 self-service to customers
The graphs below provide a visual representation of the improvements that Secure Financials can achieve over time by implementing a KM initiative for customer service.

Figure 1 illustrates the volume of contacts, which make it to an agent. The ServiceWare scenario savings grows with each year, and in year three results in over 200,000 calls being deflected to other less expensive channels.

Figure 2 illustrates the desirable transfer to a more optimized contact channel mix, including Web self-service, chat and e-mail. While the improvements are graduated over time the net effect is that Secure Financials is moving into a more cost effective support model.

Figure 3 shows the improvements in cost per contact over time based on all of the inputs and metrics measured during the ROI analysis.
ServiceWare's Approach to Measuring ROI - Business Impact Analysis

At ServiceWare we work with you to qualify and quantify the savings you can expect and then we come back post-implementation to measure your actual results. Every solution provider in the market today has its own technology, its own corresponding implementation model, and its own core competencies. For an implementation to be successful, however, a company cannot overlook how these differentiators fit the business profile of the customer, including the type of solution required, the ROI objectives, the corporate culture and tolerance of change. Through its in-depth, complex analysis, ServiceWare’s Business Impact Analysis (BIA) assists companies in understanding not only the features and functions of a solution, but also, how that solution fits their unique business objectives.

The BIA provides a consultative approach to calculating ROI. This approach, although unique to the typical technology implementation process, differentiates ServiceWare in the service and support industry. Through the efforts and expertise of our team, ServiceWare customers have gained a keen understanding of both the costs and benefits of deploying a knowledge-enabled customer service solution. As a result, they are assured they've made the best decision for their enterprise—and their customers. And they are able to monitor, measure and report the ongoing impact of their decision to implement a knowledge enabled customer service solution within their organization.

Based on your company's needs and stage in the technology assessment process, we will apply one of the BIA's business impact protocols.

ServiceWare’s Reality Base

ServiceWare's Reality Base is another way ServiceWare adds value to our customers' knowledge management initiatives. The Reality Base is a benchmarking baseline that was established from the compilation of data from hundreds of customer implementations over a period of many years. The data is continuously collected from our Business Impact Analysis engagements and anonymized to protect customer confidentiality. The data is then analyzed by our professional knowledge management consultants using a variety of statistical controls. These controls ensure that we set realistic improvement goals for our customers. We use our customers' unique starting points to help them determine and achieve their goals and once implementation is complete, we continue to work with our customers to help measure the level of actual improvement and gain a true ROI.

Business Impact Analysis

This service assesses how ServiceWare’s knowledge management solutions fit with your company and culture. The Business Impact Analysis assesses more than simple call avoidance—it offers a full, systematic analysis of your KM implementation. This service also identifies potential total cost of ownership and outlines optimal conditions for success.

Business Impact Results

The BIA Results program exemplifies ServiceWare’s ongoing commitment to our clients’ success. This service consists of consultative and quantitative analyses designed to educate, stimulate and evaluate the business results achieved by implementing ServiceWare’s solutions.

“ServiceWare provides the opportunity to improve 24x7 service and operational efficiencies that ultimately affect the bottom line.”

Terry Peterson,
VP of Services
FourthShift, a SoftBrands Company
About the Author

As ServiceWare’s Director of Business Analysis, Tom Tobin has helped dozens of clients evaluate the benefits of ServiceWare’s products. Tom has authored technical training videos and computer-based training for General Physics. He also has served as the business applications manager at Canon ITS, where he managed a variety of technical application projects including: knowledge management, IVR, and Intranet/Internet strategy consulting. Tom has an MBA from the College of William & Mary, and a BS from the State University of New York. He is currently working on an advanced degree in Knowledge Management at George Washington University. Additionally, he is a regular guest lecturer on Knowledge Management at William & Mary’s School of Business and frequently publishes many articles and white papers focusing on the business and financial benefits of knowledge-powered support and eService.

About ServiceWare Technologies

ServiceWare is a leading provider of knowledge-powered applications for customer service and IT support — empowering organizations to deliver superior service while reducing costs. ServiceWare’s problem resolution software, ServiceWare Enterprise™, enables agents and end-users to quickly find accurate and consistent answers to even the most complex problems — in the call center, help desk or via Web self-service. ServiceWare’s self-learning and organizing search technology, the Cognitive Processor®, adapts based on usage and its easy-to-use knowledge management tools allow agents to access both structured and unstructured knowledge sources and contribute new solutions in the workflow, ensuring a robust knowledge base solution.

Leading organizations have implemented ServiceWare software including EDS, H&R Block, AT&T Wireless, Cingular Wireless, Fifth Third Bancorp, Green Mountain Energy, Reuters, and QUALCOMM. Learn more today by visiting www.serviceware.com or call 1.800.572.5748. Outside North America, call our international office at +(44)(0)1280.826345.