# Measuring the Return on Knowledge

*Justifying, Measuring and Optimizing Knowledge Management Initiatives*

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# Contents

# 1 About This Report

This report was written by Service Excellence Research Group, LLC (ServiceXRG) and sponsored by Knova Software to explore the best practices for measuring the impact of knowledge management initiatives. This report examines the characteristics of successful knowledge management initiatives and the essential metrics required to track performance, measure impact, and identify opportunities for continuous improvement. Further, this report examines the potential impact of knowledge management to yield cost efficiencies as well as provide the catalyst for meaningful transformation of service into a high-performance, customer-focused organization.

This report is based on recent studies by ServiceXRG including: ***Knowledge Management***, an in-depth study of Knowledge Management strategies and best practices; **Strategic Account Management**, a focus on strategies for managing high-value accounts; and a recent study of **User Perceptions** of service based on interviews with 350 enterprise technology users and IT professionals.

# 2 Knowledge Assets

## Capitalizing on Experience and Expertise

The single largest asset a service organization has is the collective experience and expertise of its staff. It is the need to access this expertise that compels customers to initiate a service request. The successful response to a service request depends upon the efficiency by which the appropriate knowledge can be transferred to the customer.

Like the oil under the sands of the Middle East, knowledge assets wait to be extracted, refined and leveraged. Effective knowledge management — the processes of capturing, enhancing and reusing an organization's experience and expertise — offers the means to optimize service efficiency and maximize customer success though effective knowledge transfer. Whether accessed through live assistance or self-services, knowledge is the fuel that drives service efficiency, innovation and customer satisfaction.

Knowledge management appears to make good business sense and has led to many formal and informal knowledge management initiatives. Informal knowledge management initiatives have largely been possible due to the minimal investment required to get started and make meaningful progress. Formal projects often require more investment and the accompanying business justification.

## The Need for Cost/Benefit Validation

Informal knowledge management initiatives are effective at leveraging common knowledge to address frequently asked questions, but they are not capable of maximizing the return on knowledge assets. As awareness of the power of harnessing intellectual assets grows and demands on knowledge resources increase, there must be a concerted effort to invest in the tools, technologies and people to achieve sustainable knowledge management activities. Moreover, for knowledge management to yield maximum benefit, the organization must properly fund and support the initiative. A lack of support is the primary reason for the failure of knowledge management projects. Underfunding of knowledge management initiatives stems from difficulties associated with quantifying tangible business impact.

As knowledge initiatives take hold and mature, it becomes essential to conduct true cost/benefit analysis to determine the proper level of investment for knowledge management and the expected return on investment. Continued success will come from efforts to enhance content-creation processes, employ enhanced technologies and deliver tangible business value by leveraging knowledge assets. A successful cost/benefit analysis for knowledge management must include the following key ingredients:

- Clear understanding of business needs.
- A definition of success.
- Relevant metrics, inputs, and assumptions to measure success.
- A credible evaluation model.

## Beyond Cost Efficiencies

For many service organizations, knowledge management represents a significant opportunity to achieve cost efficiencies. While cost efficiency is a reasonable goal, it is not necessarily the final objective. When knowledge is leveraged to reduce service resolution time or help customers help themselves, fewer support staff are needed to handle live-case demand (assuming that demand remains constant). While tangible savings can be realized by reducing staff, knowledge management makes it possible to consider redeploying resources rather than merely cutting positions.

As efficiencies from knowledge management are realized, the potential to reallocate resources to higher-value activities becomes possible. Redeployment of resources includes re-tasking existing staff — which may require new skill-sets to pursue revenue-generating activities — and initiatives to improve repurchase rates, customer satisfaction and loyalty. The ability to leverage knowledge assets offers a catalyst to re-focus the organization away from low-value, repetitive tasks toward customer-focused activities that can yield increased satisfaction and revenue.

# 3 The Business Need

Successful knowledge management is not achieved by chance. Rather, it is a function of understanding the scope of the required effort, establishing a clear vision of the expected benefits, and securing the support and resources necessary to execute.

The formulation of a successful knowledge management strategy must be based on answers to five fundamental questions:

- *What problem are we trying to solve?*
- *What benefits can we expect?*
- *How will we measure progress against our goals?*
- *What level of support is required from the organization?*
- *What is the cost to execute this initiative?*

Although it may not be possible to answer these questions conclusively, it is essential to invest sufficient effort toward a reasonable response to each question. Further, there must be organizational acceptance. Failure to articulate answers to the fundamental questions may result in unrealistic expectations or lack of executive support needed to achieve project objectives.

Providing answers to these questions is not only required at the inception of a knowledge management initiative, but must be an ongoing activity as the project evolves and matures.

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# Knowledge Management Success

## Defining Success

Knowledge management success must be clearly defined and articulated to assure consistent expectations regarding an initiative's business impact. The definition of knowledge management success will vary from company to company and will evolve as knowledge management initiatives mature. Further, knowledge management success must be expressed in terms of formal goals and objectives. Well-defined goals and objectives help set expectations regarding the possible return from a knowledge management investment.

Four primary elements should be considered in the development of goals and objectives:

- **Efficiency** – The ability to improve processes used to diagnose and resolve customer issues by leveraging knowledge assets.
- **Effectiveness** – The expected impact of knowledge management on providing timely, accurate and consistent responses to customer questions.
- **Deflection** – Deflection, also known as case avoidance, conveys the potential impact knowledge management will have on delivering the same level of service with fewer resources or responding to increased demand with the same staffing levels. This is achieved by helping customers resolve their issues through self-service resources.
- **Transformation**– Transformation describes the redeployment of resources due to efficiency gains. It represents the direct impact attributable to knowledge management including cost-savings, improvements in customer satisfaction and increased revenue.

## Establishing Objectives and Goals

Well-defined objectives and goals provide the means to describe the expected outcome from knowledge management initiatives. The distinction is as follows:

- **Objectives** – The function of a clearly defined objective is to establish realistic and focused expectations of the potential impact from knowledge management.
- **Goals** – A goal provides an indication of the extent to which an objective is met. Goals must be realistic, and the inputs and assumptions used to establish a goal must be credible.

Objectives and the associated goals provide a basis for determining if the initiative is on target to solve the right problem and has the potential to make a meaningful contribution to the business. The scope and impact of the project as defined by goals and objectives will have a direct correlation to the level of support and funding that can be secured.

### Table 1: Examples of Business Goals and Objectives

| Element | Objectives | Goals |
|---|---|---|
| **Efficiency** | Improve the speed and accuracy of processes used to diagnose and resolve issues | Improve handle time by x%<br>Simplify troubleshooting processes |
| **Effectiveness** | Provide access to technically verified descriptions of known problems and their solutions to assure consistent and accurate responses to customer questions | Increase first-contact closure rate by x%<br>Reduce escalations to tier 2 by x%<br>Reduce the rate that previously closed cases are reopened by 40%<br>Increase customer satisfaction by x% by providing correct answer |
| **Deflection** | Provide customers with direct access to information to help them help themselves | Meet increasing support demand without the need to hire new service staff<br>Improve resolution rates on self-service<br>Improve customer satisfaction scores by x% |
| **Transformation** | Achieve efficiencies at a sufficient level to allow redeployment of resources to high-value activities | Redeploy 3 of 5 FTE employees to account-management activities |

Source: ServiceXRG

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# Knowledge Management Impact

## Inputs, Assumptions, Metrics

There is practically no limit to the number of knowledge management metrics that can be measured. There are, however, metrics that *must* be measured. Essential metrics are those that provide insight into performance against established knowledge management goals and objectives.

Actual performance data may not be available when developing goals to forecast the projected impact of a knowledge management initiative. To develop an accurate forecast, credible inputs and assumptions must be used in place of actual performance data. Industry benchmark data offers the means to develop an educated projection of expected knowledge management performance. The inputs and assumptions used for establishing a cost/benefit model must also be used to form the basis for measuring ongoing performance.

### Measuring the Impact of Knowledge Management on Efficiency

The ability to capture and share knowledge offers the potential to reduce the time needed to resolve a case, thus lowering the cost of service delivery. Efficiency can be achieved by:

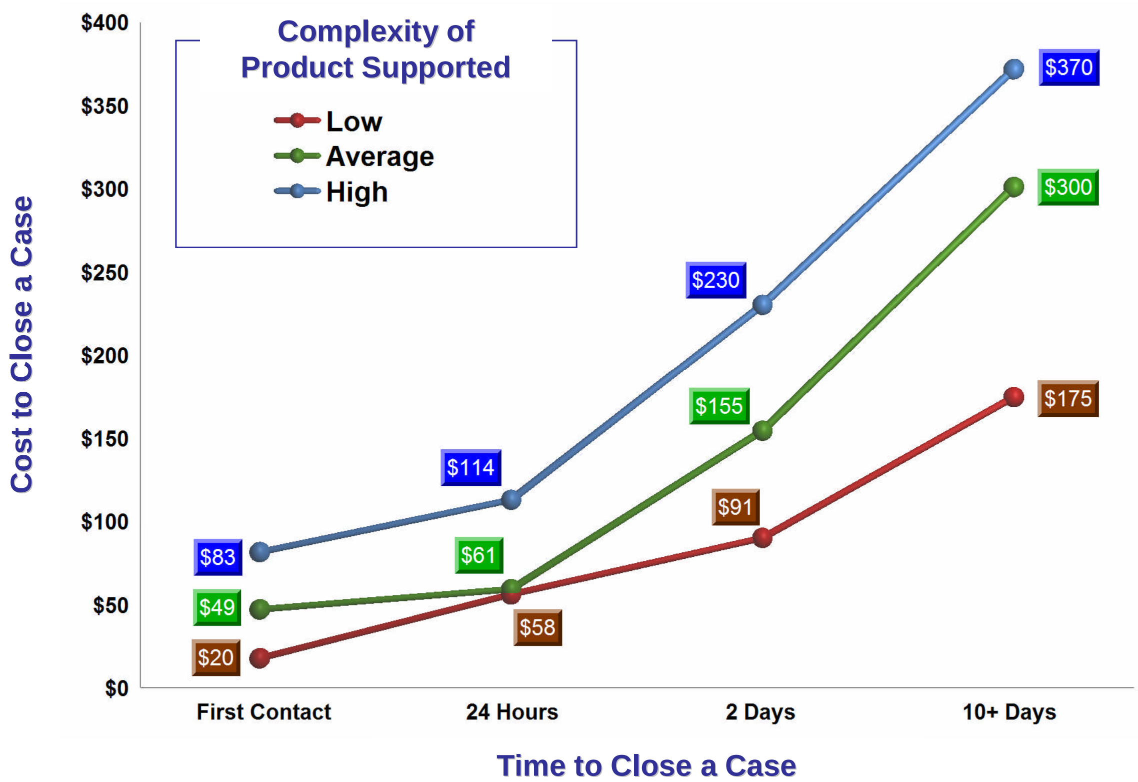
- *Increasing the rate that cases are closed on first contact.*
- *Reducing the time it takes to diagnose a problem.*
- *Reducing the number of people that need to be involved in resolving a case.*
- *Accelerating the time it takes to transfer knowledge to customers.*

### Table 2: Process-Efficiency Metrics and Benchmarks

| Metric | Description | Industry Benchmark |
|---|---|---|
| **Diagnostic Resource Use** | The rate that customers and support reps leverage existing tools and knowledge resources to diagnose and resolve issues | > 50% |
| **Talk Time** | The time it takes to convey an answer to a customer by phone | 14.4 *minutes* |

Source: ServiceXRG

**Figure 1: The Cost of Escalation by Complexity of Product Supported**




Source: ServiceXRG

## Measuring the Impact of Knowledge Management on Effectiveness

In knowledge management initiatives, effectiveness is the measure of how accurately a problem is resolved. Based on ServiceXRG's research, the effectiveness of a solution is, in many cases, more important to a customer than the time it took to resolve the problem.

Effectiveness is measured based on the coverage of a particular issue and the ease with which relevant information can be found and applied. It applies to both self-service and assisted transactions. The ultimate indicator of effectiveness is the acknowledgement by a customer that an issue is resolved. Effectiveness can be achieved by:

- *Providing comprehensive coverage of issues with which customers are likely to need assistance.*
- *Making certain that users can find and understand how to apply the information.*

### Table 3: Effectiveness Metrics and Benchmarks

| Metric | Description | Industry Benchmark |
|---|---|---|
| **Topic Coverage** | Topic coverage describes the rate at which sought topics are available within the knowledge-base. | 60.0% *of topics covered* |
| **Searches per Session** | The average number of times per session that a customer conducts a search. Effectiveness depends on finding relevant information with the fewest number of searches. | 2.8 *searches per session* |
| **Docs Opened per Search** | The average number of documents opened by a customer per search. Effectiveness depends on finding relevant information within the first few documents opened. | 4.0 *docs opened per search* |
| **Customer Success** | The rate that customers indicate they were successful in finding useful information. | 48.1% *success rate* |

Source: ServiceXRG

## Tangible Benefits

Knowledge management can be a costly and time-consuming initiative and can have disappointing results if not implemented properly. Fortunately, it can be a highly successful initiative with tangible business benefits and clear return on investment.

While it is important to define the tangible benefits of knowledge to the company, there is a significant risk in overstating the actual impact of knowledge based solely on deflection. Calculations based on multiplying the number of cases that are deflected by the cost per case merely result in unrealistic and inaccurate numbers. The true impact of a knowledge management initiative include:

- **Lower Service Costs** – Lowering support costs as a result of meeting the *same* support demand with *fewer staff.*
- **Doing More** – Maintaining the same support budget while responding to *higher* support demand with the *same* number of staff.
- **Restructuring and Redeploying** – Offloading support demand frees up headcount that can be redeployed to high-value activities.

### Lower Service Costs

Savings can only be realized when the cost of service is reduced. This means that you have increased support efficiency, which in turn means that you can do more with less. If an organization increases service efficiency, and support demand remains constant, it does not need the same number of staff to meet demand. To translate increased efficiency into savings, companies need to scale-back staffing levels.

### Doing More

Increased efficiency means that an organization will need to add fewer, if any, new staff to meet any increased demand they may be forecasting. The benefit from increased efficiency is the savings over what would normally be spent to meet increased demand.

# 6 Organizational Transformation

## Beyond Efficiency and Effectiveness

The most commonly used justification for a knowledge management initiative is that it will lower costs and/or increase operational efficiencies. While cost efficiencies are important, knowledge management offers a much greater strategic benefit: the potential to transform a service organization and enable it to make greater contributions to the business. Service organizations have finite resources, and the ways in which these resources are allocated can affect customer satisfaction, loyalty and profit.

The most basic benefit of knowledge management is that it leverages knowledge and expertise that already exists within the organization. Continual live response to customer questions about topics that are well-understood and have been handled many times is inefficient and ties up valuable resources. This low-value activity can result in a service organization incurring unnecessary costs and gaining little or nothing from customer interactions. The more that existing knowledge can be leveraged to offload conventional transactions, the more likely that resources can be redeployed to high-value activities such revenue generation and efforts to increase customer satisfaction and loyalty.

## High-Value Opportunities

Ask any service manager what they would do with more resources and he or she will likely detail an extensive list of new projects and initiatives. The efficiency gains realized from knowledge management can be turned into cost-savings through reduced service costs, including cutting staff. Alternatively, staff can be reallocated to high-value activities as outlined in the table below.

### Table 4: New Opportunities

| Opportunity | Description | Expected Impact |
|---|---|---|
| **Expand Account Management** | Allocate additional support resources as account managers and/or account teams to provide high-touch services for key accounts. Although dedicated account management is more costly to provide, customers that have an account manager (or team) are more likely be satisfied and renew service contracts. | ↑ Service Revenue<br>↑ Customer Satisfaction<br>↑ Service Costs |
| **Enhance Knowledge-base Content** | Because knowledge-base content covers the most common issues, the types of questions that require live assistance will become more difficult. The ability to identify and document answers to more-difficult and time-consuming topics will increase the savings associated with knowledge management and reduce service delivery costs. | – Service Revenue<br>↑ Customer Satisfaction<br>↓ Service Costs |
| **Reduce Case Backlog** | One of the top causes of customer dissatisfaction is a service organization that takes too much time to resolve a case. The ability to allocate additional resources to reduce open cases and expedite case closure rates will result in improved customer satisfaction. | – Service Revenue<br>↑ Customer Satisfaction<br>– Service Costs |
| **Offer On-Site Support** | The ability to allocate support staff to proactively visit top accounts will help solidify long-term relationships and minimize support issues through system health checks and updates. | ↑ Service Revenue<br>↑ Customer Satisfaction<br>↑ Service Costs |
| **Increase Contract Renewals** | One of the greatest opportunities for service revenue enhancement comes from maintaining customer relationships through consistent service contract renewals. Often, the primary reason for non-renewal is lack of perceived value and poor processes for winning the renewal. Focusing additional staff time on renewals offers high financial return. | ↑ Service Revenue<br>– Customer Satisfaction<br>– Service Costs |
| **Deliver Proactive Services** | When support staff are not overwhelmed by reacting to customer issues, they may be able to proactively identify potential issues before they become service requests. This results in lower service demand and higher customer satisfaction. | ↑ Service Revenue<br>↑ Customer Satisfaction<br>↓ Service Costs |
| | | ↑ Customer Satisfaction<br>– Service Costs |

Source: ServiceXRG ■ = Positive Impact ■ = Negative Impact – = No Impact

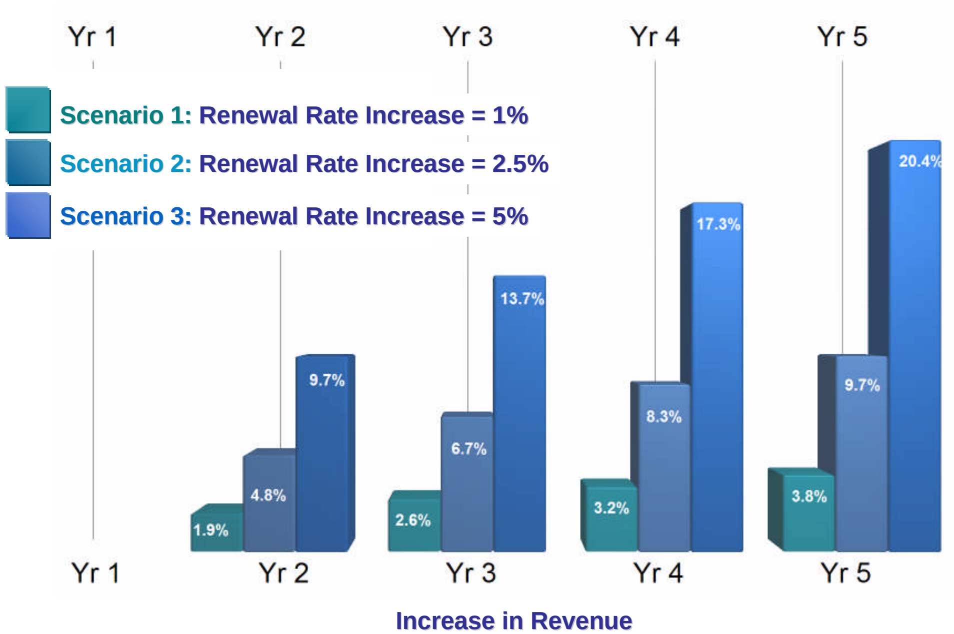
## Investing in the Future

When service delivery efficiencies can be achieved through knowledge management, the resulting gains can be measured in terms of support staff time and effort. The total effort offloaded by knowledge management can translate into the full-time equivalent of several support staff positions. A service organization can translate this efficiency into savings by reducing total support staff. Conversely, this efficiency gain can be used to reallocate staff and resources that can perform any of the high-value functions described in the table above.

In a recent study titled "***Strategic Account Management,"*** ServiceXRG found that 71.1% of service organizations that offered account management services experienced an increase in total revenue, while 60.5% indicated account management helped to increase service contract renewal rates. That's significant, as a small increase in support contract renewal rates can translate into significant revenue.

In the scenarios below, contract renewal rates are assumed to be improved by 1% (Scenario 1), 2.5% (Scenario 2) and 5% (Scenario 3) as a result of adding additional high-touch services such as account management. As the figure shows, even a small increase in contract-renewal rates provides a significant increase in support contract revenue.

**Figure 2: Economic Impact**




Source: ServiceXRG

## Organizational Transformation

Organizations naturally think about the cost-savings associated with a knowledge initiative, yet savings may be the tip of the iceberg in terms of overall benefit. Any initiative that results in a net efficiency gain offers the opportunity to reduce costs or reinvest efficiency gains back into the organization. While cost-savings may be highly attractive, the reinvestment of savings may yield even greater returns to the organization.

In other words, what may have started as an initiative to reduce service delivery costs can introduce a higher-value opportunity — the chance to grow the business. Successful knowledge management initiatives offer the catalyst to help transform a service organization from reactive customer response to proactive customer care.

# About ServiceXRG

ServiceXRG specializes in helping companies develop and execute service and support strategies that strengthen customer relationships and optimize financial performance from service operations. ServiceXRG's research provides a balanced perspective of the IT services industry with views from users, service professionals and suppliers. ServiceXRG combines years of real-world service industry expertise with a unique ability to collect, analyze and present high-quality industry data. ServiceXRG provides management consulting, custom benchmarking, competitive analysis and customer satisfaction assessment, and publishes a series of reports on industry trends and best practices. For more information, visit www.servicexrg.com.