



An eGain white paper

Best practices

# Knowledge Management for Contact Centers and Help Desks

## Lessons from the Global 2000

Knowledge management (KM) is different things to different people. Most organizations see it as using technology to share critical information. KM, to many businesses, is maintaining a document repository that lets engineers share design data or consultants exchange best practices. To contact center and helpdesk managers, KM usually means providing agents with a problem resolution tool, which could be anything from a simple answer database to a sophisticated guided help system. We take a broader view of KM and define it as *a set of practices to maximize the business value of an organization's knowledge by gathering, maintaining, and delivering it at critical points in business processes.*

In this paper, we begin by explaining why KM is critical for service organizations both big and small. Then we present best practices gathered from successful KM initiatives of Global 2000 companies. The last section of the paper describes eGain's innovative and awardwinning KM tools.

- ▶ [Why KM?](#)
- ▶ [KM best practices](#)
- ▶ [KM with eGain® Service™](#)

## Why KM?

---

KM is a proven approach to maximizing the business value of knowledge within a organization. KM initiatives that are focused on meeting well-defined strategic objectives and are based on implementation best practices, provide significant and predictable ROI. They also contribute to long-term competitive advantage by improving the total customer experience.

### Objectives of KM initiatives

Knowledge management systems are typically deployed to achieve specific, measurable goals in one or more of the following areas:

- ▶ **Lower service cost:** Knowledge management helps companies lower the cost of customer service by reducing repeat calls, call handling and wrap-up times, and agent training, and by maximizing the ability of Level 1 (L1) agents to solve problems. Improving the performance of L1 agents not only enhances the net efficiency of call center staffs, but also gives companies access to a bigger labor pool, because there is a reduced need to find individuals who have both interpersonal skills and domain knowledge. Finally, knowledge management can enable companies to divert a significant amount of traffic to web self-service.

Improved customer service often produces results in other operational areas. For example, a prominent British telecommunications company is now saving over one million pounds per year in reduced handset returns by doing a better job of identifying customers who mistakenly think their phone is broken, when in fact they don't know how to use it properly.

- ▶ **Improved service:** Knowledge management also leads to better quality of service. Customers are more likely to receive the right answers faster, with no need to be put on hold or transferred to another agent. And, the value of superior customer service, of course, is enormous. A survey conducted by call center expert Dr Jon Anton for his most recent book, *eBusiness Customer Service* revealed that customers who buy a product with problems but receive “world-class” customer service while resolving the problem are more than twice as likely to repurchase from the company than customers who buy a perfect product with no problems at all.
- ▶ **Consistency in multichannel service:** Without a knowledge management system, it is very difficult for an enterprise to know the responses customers receive, much less control them. Knowledge management ensures that customers with the same question receive the same response, regardless of agent, interaction channel (phone, web, email), or interaction mode (self, assisted, or proactive service). Once consistency has been achieved, it is then possible to fine-tune responses and thereby boost efficiency and quality even further.
- ▶ **Agent productivity:** Contact centers and help desks invest a lot in agent training—an area of significant “misinvestment.” Most agent training has been focused on learning (pre-call training). It was a good idea once, but is out of step with the recent

self-service transformation that has swept contact centers and help desks. Before phone and web self-service became popular, the 80/20 rule applied well to service interactions: 80% of the calls were about 20% of the issues. So, it made sense to train an agent on the 20% issues. They would solve 80% of the issues and escalate the rest. Self-service targets the same 80% now. As a result, the issues that get to agents are more complicated and definitely not the kind that can be learnt easily in a few weeks of novice agent training. At the same time, product cycles have shortened, new product variations are exploding, and agents are burning out.

There is a need to shift the training paradigm from “pre-call” to “in-call.” Instead of forcing the agents to learn the processes, new interactive process support software can help capture and codify service best practices that can be interactively used by novice agents. This approach has helped large wireless service providers and financial services companies reduce training time for agents from two months to one week, even while their first-time resolution rates have improved by 15%!

- ▶ **Extending contact centers to the web:** As the web becomes an increasingly important touchpoint for customers, enterprises must understand the important role knowledge management can play in web-based interactions. Most enterprises are likely to end up with multi-channel customer response systems and will have to allow cross-channel escalations. Obviously, one of the most important strategic considerations is ensuring that knowledge management systems are available for both the telephone and online channels.

There are also important integration issues to consider. For example, most email management systems provide for some level of template-based response, which agents can accept, tailor, or reject in favor of a customized response. This is an area where knowledge management can play a major role if it is integrated into the larger email management solution.

Another customer interaction mode where knowledge management can play a role is self-service. Knowledge management is not so much about searching (e.g. What’s the address of your New York office?) as it is about solving (e.g. Which mutual fund should I buy?). It is ideal for guiding users, via a series of questions, to problem resolution. In fact, it can be used to guide individuals through virtually any set of sequential steps required to perform a specific task. For example, when someone dies in the United Kingdom, the next of kin must go through 26 different steps to achieve legal closure. The British government has deployed a knowledge management system to help citizens navigate through this complex process.

- ▶ **Outsourcing:** When a company decides to outsource customer service, it is not a simple matter to train a whole new crew of agents on the intricacies of an unfamiliar product line. Knowledge management can make the transition virtually painless, while significantly lowering the cost of training. This factor can be used as a negotiating point to lower the price of outsourcing contracts.

- ▶ **Merging contact centers:** This challenge is in many ways similar to outsourcing, in that a large number of agents often need to be trained in areas that are completely unfamiliar to them. Knowledge management can enable the creation of a central repository for all knowledge required for both groups, ensuring a consistent approach to problem resolution.
- ▶ **Transforming a service force into a sales and service force:** The agents who are best at service and support don't necessarily do well converting support calls into sales. The knowledge system, while guiding agents in analyzing customer problems, can suggest specific selling opportunities for complementary offerings and provide agents the scripts and information needed to present those offerings to customers. In this case, the knowledge system not only provides "the right answer," but actually helps the agent sell.

## KM ROI

The bottom line is that knowledge management is also a strategy, not just a tactic, and it is a set of business practices, not merely a technology. There is no question that strong, active support from upper management is crucial to the success of a knowledge management deployment, particularly in the beginning. More deployments fail due to the lack of management commitment than for any other cause.

In the current economic climate, projects must demonstrate compelling ROI in order to obtain funding, and knowledge management is no exception. It provides three categories of economic value:

1. In typical call center implementations, it results in **better efficiencies**. The applicable metrics, along with typical results (derived from eGain customer case studies), are listed below. All of these parameters can be easily measured by most call centers.

Metric	Typical Result
Repeat Calls	-30%
Incorrect Transfers	-30%
Call Avoidance	+16%
End-to-End Call Length	-30%
Training Time	-80%
Staff Premiums	-15%
First Time Fix	+24%

2. The second category applies to implementations where knowledge management is used not only to support call center agents, but also to serve as the engine for web self-service. Companies that offer web-based self-service have been able to achieve significant ROI by reducing incoming phone calls.
3. The third category is often the hardest to measure, particularly in the short run, although for some companies it provides the greatest value. This category comprises the following:
  - ▶ **Reduced customer churn:** The increasingly complex nature of products and services has meant customer frustration and, often, defection. A common reason for the large churn rates in high-technology services such as satellite TV and mobile telephone is that customers simply don't understand how to use these services correctly. Knowledge management can enable agents to educate customers during service interactions, ("By the way, did you know that you can go back to the beginning of a voice mail message by hitting \*7?") Education reduces frustration and can help build, if not loyalty, at least an acceptable level of customer satisfaction. Unfortunately, as churn rates are affected by numerous factors, including some that are totally beyond a company's control (such as fluctuating relocation rates), it is difficult to measure the effect of customer service on churn. However, it is possible to measure the rate of recapture—the percentage of unhappy customers who call in to cancel their service and are successfully talked out of it—and assign a financial value to it.
  - ▶ **Repeat business:** As noted earlier, providing high quality customer service can boost repeat business.
  - ▶ **Increased sales:** This includes revenue from up-selling and cross-selling. Knowledge management can be used to prompt agents to suggest specific products or services based on the nature of the dialog between the agent and the customer.

## KM best practices

---

### Gathering knowledge

The first challenge in the knowledge-gathering process is simply deciding what knowledge to gather. For example, while identifying the most frequently asked questions is critical for a self-service web site implementation, call centers will also need to know the most frequently escalated questions. Moreover, while management goals may center around ROI issues, the system must be designed with users in mind, or it will not be successful.

Here is a step-by-step review of the knowledge-gathering process.

## Step 1: Building the team

There are four roles in the knowledge management team:

- ▶ **Lead expert:** The individual (or individuals) who decides how the knowledge base will be organized, which topics will be covered, and to what extent.
- ▶ **Users:** Call center agents who have good performance records and can provide suggestions.
- ▶ **Knowledge authors:** Individuals who are technically trained in using authoring tools.
- ▶ **Project manager.** The individual who keeps the project on track.

Depending on the scope of the project, one person may play several roles.

## Step 2: Assessing the value of knowledge

The best way to determine what knowledge should be gathered is to estimate what the value to your enterprise would be if every agent managed service interactions by effectively using that knowledge. For example, if the ten most-escalated inquiries could be handled by L1 agents, how many fewer L2 agents would you need, and how much would that cut operating costs? When assessing value, it is also important to identify the questions which entail the most risk if answered incorrectly.

One approach to assessing the value of knowledge is to identify the various touchpoints in the customer life cycle and determine potential “churn points”—situations that may make customers switch to another company. This exercise also helps identify other opportunities to improve customer experience via knowledge management. Having identified the touchpoints that have the greatest potential value associated with them—either positive or negative—the second step is to determine the frequency of these churn points. High value and high volume situations deserve the most attention.

## Step 3: Setting content boundaries

When defining the scope of the knowledge base, the most common mistake is to try to include too much. Overly ambitious deployments almost always result in what’s called “the Swiss cheese problem”—a knowledge base that is solid in places, but full of holes. This is a recipe for failure, because if users can’t find the answers they want most of the time, or get the wrong answers, they will quickly stop using the system. It is better to be thorough with a limited area than to cover a broad area superficially. For instance, for an enterprise that sells printers, scanners, fax machines, and copiers, the best approach would be to cover one product line thoroughly, rather than all products at once.

#### **Step 4: Prioritizing objectives**

Establishing the value of knowledge enables prioritization, but this process may involve tradeoffs. For example, in a technology subscription environment like cable TV, Internet service provision, or mobile telephony, there are typically three competing goals:

- ▶ Speed of problem resolution (the “right answer” focus): The shorter the average duration of a call, the lower the cost to the enterprise.
- ▶ Customer retention: Educating customers about unused features can result in greater customer acceptance and lower churn.
- ▶ Up-selling and cross-selling: It may be that the best solution to a customer’s problem is selling that customer a higher tier of service or an add-on product.

Enterprises must match their knowledge systems and processes to the service priorities.

#### **Step 5: Setting time boundaries**

In our experience with many deployments, a time-boxed approach to knowledge gathering works best. If the deployment appears to be falling behind schedule, narrowing the scope of the knowledge base (to avoid the Swiss cheese problem) and finishing on schedule is the way to go. The reason has to do with ROI—the main reason for the deployment to begin with. The longer it takes to get the system up and running, the longer it takes to achieve the ROI. If the knowledge scope has been correctly identified and prioritized, the most important questions will be covered. Furthermore, it is always possible to expand the scope later.

As a rough guide, a typical enterprise deployment should not take longer than three months (after planning is done), with three or four full-time people engaged. This period includes software installation, knowledge gathering, and testing both the quality of the knowledge base as well as the performance of the system.

#### **Step 6: Selecting and managing experts**

Obviously, the people who contribute to the knowledge base must be technically competent, but it is equally important that they not be too far removed from day-to-day customer contact. Successful knowledge management depends as much on the questions as the answers, and it is sometimes difficult for subject matter experts to “stoop” to the level of ordinary customers who may not know complex details like the baud rate of their modem or whether their mutual fund is front-loaded or back-loaded.

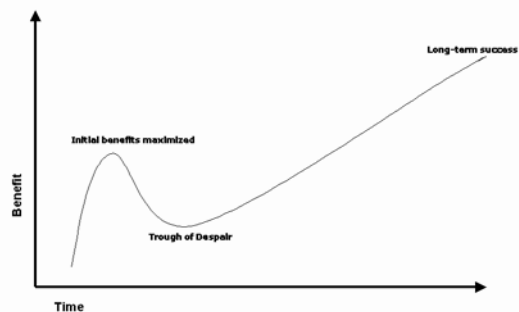
There is another very important issue with experts: the reluctance to share knowledge and the fear of being “replaced by a machine.” It is important, therefore, that enterprises plan and communicate how the role of the experts will change once knowledge management has been implemented. Moreover, enterprises should create incentives for domain experts to share their knowledge with the rest of the organization.

## Step 7: Controlling content

Once the knowledge gathering process has been completed, results must be reviewed in light of strategic objectives. It is critical for organizations to set up a review process for approving the final content of the knowledge base. This includes determining who (beyond the experts) should review the content, and who has the authority to make final decisions. There are good reasons for not leaving these decisions to content experts alone. For example, any material an enterprise presents to the public can have legal or safety implications. One good approach to quality control is the use of workflow authoring software where agents (or customers and partners, in the case of self-service) can suggest additions or changes, but only authorized individuals can approve them.

## Maintaining knowledge

Once in place, most knowledge management deployments follow a predictable pattern of dramatic initial success and glowing upper management support, followed by a period of decline, and then a gradual recovery and rise to greater levels of benefit, summarized in the graph below.



*Figure 1: A typical experience with a knowledge solution*

The primary cause for this pattern is diminished attention by management once the project has been launched, and failure to rigorously maintain and update the knowledge base.

This trend also reflects the nature of the problems knowledge management is designed to solve, the indirect training knowledge management provides to L1 agents, and the combination of short-term and long-term goals knowledge management is expected to achieve.

In a call center dealing with high turnover, with under-trained L1 agents and a chronic shortage of L2 agents to handle escalations, knowledge management will produce immediate short-term results apparent after a few weeks in the form of shorter hold times and call durations, lower call-back rates, fewer escalations and an overall

improvement in customer satisfaction. Knowledge management will also yield long-term results, apparent after several quarters, in the form of shorter training cycles, more favorable customer-to-agent and L1-to-L2-agent ratios, and, in many cases, indirect results such as reduced churn.

In between the first blush of success and the realization of long-term goals, there is a period where short-term benefits are no longer increasing and it is too soon to use long-term metrics. This is the region of the graph labeled the “Trough of Despair.” This trough is usually characterized by a decline in system utilization rates. This may not be as alarming as it seems since it probably indicates that agents are improving in their ability to respond to customers. Nonetheless, under-utilization of any system is problematic, and this leads to the final factor in a successful knowledge management deployment: the need for long-term maintenance and change management. There are several areas that require ongoing attention in order to maximize the benefits of knowledge management, and some are more obvious than others. Overall, the most important thing to do is to plan for expansion and change of the original knowledge base. Here are some specific activities that can be expected after deployment.

### **Managing routine updates**

The most obvious need for managing change has to do with routine updates required by the introduction of new products and services, as well as changes in existing products, services, or policies. There must be a simple and clearly understood procedure for making updates to the system. It is also important to routinely evaluate all knowledge items based on their creation and revision dates to make sure that they are still current. This should be a software-assisted effort.

### **Refining the knowledge base**

As noted earlier, knowledge management ensures that all agents give the same responses to the same inquiries. Once consistency has been achieved, answers can be modified to improve success rates in some areas. For example, one large telecommunications company has discovered that a surprising number of mobile phone users who call to cancel their service can be recaptured. Modifying agent responses to specific customer complaints can yield significant ROI.

### **Expanding the scope**

As we have discussed earlier, it is a good idea to get the knowledge management system up and running quickly with a limited scope. However, once a knowledge management system is working, expanding its scope will increase its benefits.

### **Creating multiple interfaces**

One of the key goals of knowledge management is to help L1 agents behave more like L2 experts. However, because knowledge management systems do in fact train L1 agents as they provide service, a significant percentage actually become experts, or at

least move in that direction. When this happens, they are much less likely to use the knowledge management system. Although this is a benefit, lower system utilization is always problematic. One way to address this issue is to create a second interface for agents who are no longer beginners. However, there will always be agents at the L1 level because of new or changed products, services, and policies.

The most important practice to ensure that enterprises succeed in any of the areas outlined above is to assign responsibility for long-term change management to one individual. Knowledge management systems cannot run themselves. They will deliver maximum value with periodic attention from a designated individual.

### **Using an adaptive KM system**

An adaptive system automatically identifies knowledge bottlenecks based on self-service usage and user feedback to generate alerts and review tasks for appropriate content owners. This self-monitoring feature ensures that the self-service implementation does not languish due to lack of attention from business owners. As customers use knowledge and provide feedback (either explicitly or implicitly), their input is processed and interpreted to drive content improvement and access method refinement.

### **Delivering knowledge**

The best implementations are the ones that offer multiple access methods (FAQ, search, browse, guided Q&A) to the same common knowledge base. They let customers decide what access method they want to use. A successful strategy is to provide fewer options to novice customers and direct them to more structured forms of problem resolution like guided Q&A. A leading global technology manufacturer that we worked with discovered that customers got satisfactory solutions from the knowledge base 30% more often through guided Q&A access rather than FAQ access! This fact underlines the need to let customers choose from multiple knowledge base access options, depending on their sophistication and needs.

### **Using an adaptive KM system**

An adaptive system is useful not only for maintaining knowledge but also for delivering it. Such a solution can be configured to adapt to customer needs by exposing appropriate access methods for the user's skill level and inquiry type.

## KM with eGain® Service™

Gain has an unmatched track record of innovation in the areas of customer interaction management and knowledge management. Together with Inference, a pioneer in knowledge management that was acquired by and integrated with eGain, it has served enterprise customers with knowledge-powered customer service solutions for more than 15 years and owns fundamental patents in knowledge management.

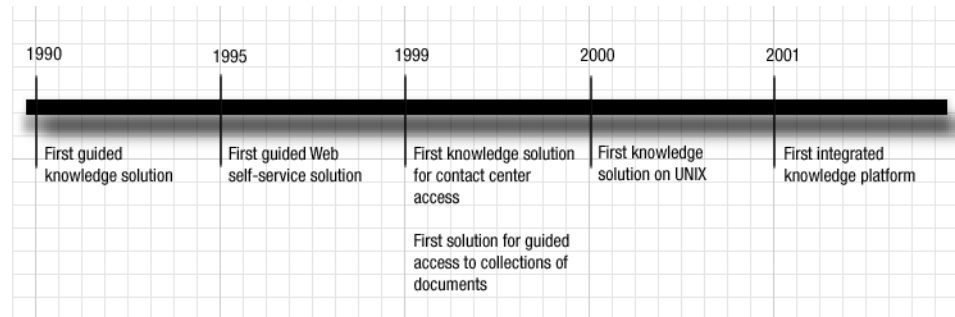


Figure 2: eGain's "Industry Firsts" in knowledge management

The KM tools in eGain Service, eGain's suite of customer service software, are the most mature, complete and universal in the industry. They:

- ▶ Support all types of users: novice to expert, end-customers, partners, as well as agents.
- ▶ Solve a range of problems: from the simple to the complex.
- ▶ Enable an array of knowledge retrieval technologies: FAQ, intelligent searches, folder navigation, guided problem resolution, and virtual agent chats.
- ▶ Support multiple languages.
- ▶ Allow companies to seamlessly leverage existing external content through adapters.
- ▶ Provide comprehensive reporting to manage the effectiveness of the knowledge base and productivity of agents.

eGain's KM tools have two innovative features that differentiate them from other KM systems.

1. **Create once, use everywhere:** The same content is used by agents as well as customers across channels. A comprehensive range of access methods (which include FAQ, search, browse, guided help and virtual agents) can be set up for this common content.
2. **Adaptive KM:** The eGain solution can be configured to adapt to customer need by exposing appropriate access methods. Second, the system automatically identifies knowledge bottlenecks based on usage and user feedback to generate alerts and review tasks for appropriate content owners. This self-monitoring

## Related white papers in the eGain library

---

eGain, a pioneer in the area of eService and knowledge management, has been delivering trusted solutions since 1990s. Our white papers reflect the expertise we have gained from helping hundreds of innovative companies set up their contact center and helpdesk organizations.

You can view our best practice white papers on our web site at [www.egain.com/best\\_practices/library.asp](http://www.egain.com/best_practices/library.asp)

feature ensures that the knowledge base does not languish due to lack of attention from business owners. As customers use knowledge and provide feedback (either explicitly or implicitly), their input is processed and interpreted to drive content improvement and access method refinement.

In addition to the software, eGain provides a complete set of professional services for knowledge management that includes business consulting, implementation services, 24x7 support, education and training services on a global basis.

## About eGain

---

eGain (OTC: EGAN.OB) is a leading provider of customer service and contact center software for in-house or on-demand deployment. Trusted by prominent enterprises and growing midsize companies worldwide, eGain has been helping organizations achieve and sustain customer service excellence for over a decade. 24 of the 50 largest global companies rely on eGain to transform their traditional call centers and help desks into multichannel customer interaction hubs, and to extend their service-based competitive advantage.

**eGain Service™**, the company's software suite includes integrated, best-in-class applications for web self-service; email, fax, and letter management; web chat and cobrowsing; and support knowledge bases. These robust applications are built on the eGain Service Management Platform™ (eGain SMP™), a scalable next-generation framework for case and knowledge management, and certified out-of-the-box integrations with leading call center, content, and business systems.

Headquartered in Mountain View, California, eGain has an operating presence in 18 countries and serves over 800 enterprise customers worldwide. To find out more about eGain, visit [www.eGain.com](http://www.eGain.com) or call the company's offices: 800-821-4358 (United States); 1753-464646 (London, UK).

---

eGain, the eGain logo, and all other eGain product names and slogans are trademarks or registered trademarks of eGain. All other company names and products are trademarks or registered trademarks of the respective companies.