Delivering Technical Support Knowledge to the Customer Community

Consortium™ for Service Innovation

MathWorks®

Setting the Stage

Recently, the folks at MathWorks took a very bold step and shut down their external knowledge base. Those of you who know how valuable the knowledge base is to customers are wondering why they would do such a crazy thing. Before you learn why, you need some context.

Several years ago, MathWorks embarked on the traditional KCS journey and successfully captured and published a subset of knowledge to their support website for customer consumption. Then and now, MathWorks depends heavily on their strong KCS implementation to assist the young support staff, many of whom have a short tenure, as well as customers demanding access to knowledge via the web. Throughout the years, the KCS implementation demonstrated continuous improvement and MathWorks enjoyed the many positive impacts of having a powerful knowledge base available for employees and customers.

Why would they choose to turn off this valuable resource? At MathWorks, they continuously explore options to make it easier for customers to find information. In this case specifically, senior leadership reflected on the quantity and quality of information in the MathWorks community forum and began to ask if there was an opportunity to leverage this resource within technical support. The parallels between the community site and the support knowledge base were obvious. Both had searchable questions and answers. Bringing them together seemed a way to make it easier for customers to resolve their issues without using multiple resources and information types. The question was whether this could be done in a way that did not detract from either the community or the company's support team.

So, with that as the backdrop for discussions, MathWorks explored the implications of bringing the knowledge base and the community together. This research started approximately two years ago and took some time to reach a point where everyone was comfortable to move forward. The idea to stop utilizing a separate knowledge base and a separate community platform required everyone to think very differently.

Starting Out

After much evaluation and discussion, leaders within the organization saw the value of this approach and opted to move forward with this idea. A cross-functional team formed to begin the implementation process. This group began with analysis and careful planning to ensure a well-organized roll out of the new customer knowledge solution. The time spent developing use cases and carefully planning proved beneficial to get two distinct organizations aligned on vision and goals. The group worked together to establish a common set of guiding principles and processes for knowledge sharing in the new combined environment.

The Goal

- Offer integrated delivery of technical support knowledge and customer community knowledge within their MathWorks community implementation.
- Bring all the information together in a single place making it easier for MathWorks customers to find what they need.

The Benefits

- Knowledge utilization increased with integrated solution
- Customer comments increased by 50%
- Increased enthusiasm and participation by MathWorks engineers

About MathWorks

MathWorks is the leading developer of mathematical computing software for engineers, scientists, mathematicians, and researchers. MATLAB, the language of technical computing, is a programming environment for algorithm development, data analysis, visualization, and numeric computation. Simulink is a graphical environment for simulation and Model-Based Design of multidomain dynamic and embedded systems. They also produce nearly 100 additional products for specialized tasks such as data analysis and image processing. Founded in 1984, MathWorks employs 2800 people in 15 countries, with headquarters in Natick, Massachusetts, U.S.A.

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As with any new initiative, success depended on the encouragement and support of executive leaders. In this case, success of this implementation was facilitated by the shared commitment that the knowledge management team and the community team would work together to find necessary solutions to the challenges that arose. This existing collaborative work environment that facilitated cross-function cooperation was already the cultural norm.

Getting to Common Ground

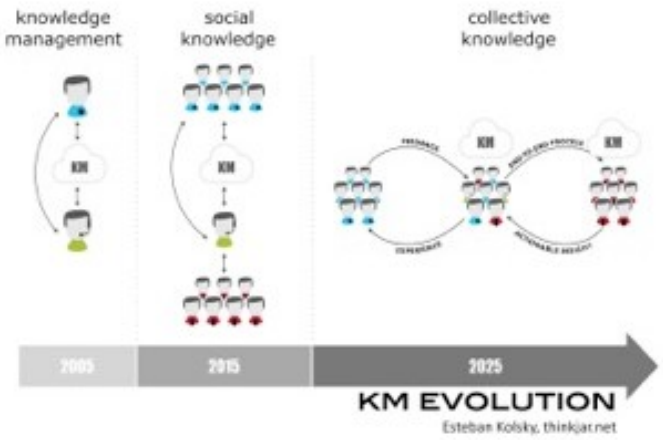
KCS emphasizes team ownership of content, and the knowledge management team wanted to retain that within the community implementation. However, within the community environment, it is more typical to emphasize individual efforts. At MathWorks, they made a decision to retain the team focus of KCS and deliver content labeled as originating with the "Support Team." No individual support engineer names are associated with this content. At the same time, the group determined that support engineers would be identified individually when they contribute within the community in other ways.

The group determined that it was also important to keep the knowledge contributed by the support teams distinctly branded. For this implementation, the support teams capture their knowledge within an internal knowledge management tool. It is then published externally to the customer-facing community automatically, and labeled within the community with a specific logo. When support engineers participate within the community space, they do so as individuals and are identified as MathWorks staff. They are on an even playing field with the customers and earn their reputation following the same methods as the customers.

When users search, they can use filters to select which source they would like to search. For example, users are able to refine the results so they can identify contributions submitted by the MathWorks Support Team.

Gained More with a Website Redesign

At MathWorks, they integrated their knowledge and community implementation at the same time that they completed a comprehensive support website redesign. The old version of the website was quite complicated with lots of



Guiding Principles

Be respectful members of the community.

- Use caution in migrating existing knowledge articles to avoid overwhelming community content.
- Maintain the original publication dates to avoid migrated content showing up as most recent contributions.
- Everyone must earn reputation equally. Neither the support team identity nor individual support staff were given reputation priority.

Acknowledge community experience and expertise.

- Invite the community to participate in KCS. Allow and encourage community comments and additions to support articles.
- Use standard community practices to monitor for incorrect and inappropriate postings.

Maintain support team ownership of knowledge.

- Publish all articles as being from the support team.
- Monitor and act on community feedback on support-generated knowledge.
- Keep published knowledge articles up to date and consistent with internal knowledge base content.

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links and icons. There was a project in motion and the working group met every week for over a year to complete the redesign that included the community customer experience. They executed usability studies and involved user experience experts to develop mockups of the new experience.

This redesign was a very user driven exercise. Customers highly active in the community were engaged throughout the redesign. This engagement ensured that the community portion of the redesign met user needs.

Benefits

This newly integrated knowledge and community content delivered via an updated customer support website has already begun to deliver incredible benefits. Here are a few examples to consider.

Knowledge delivery and utilization increased after introducing the integrated solution. While support content makes up only 10% of the total community question and answer content, it represents over 40% of the most accessed items. It is worth noting that MathWorks community knowledge is crawled and delivered by Google. This drives more traffic to the support community. According to MathWorks, the Google search engine strongly favors the community site.

Second, customers are much more likely to offer feedback and contributions via the comments feature. While the content generated by support engineers is locked, customers share feedback and post alternative answers that are immediately visible to other users. These customer comments are then brought into the internal authoring tool and the content is flagged for updates. This brings the community members into the KCS Evolve Loop process directly. Comments submitted immediately increased by 50%. As further evidence of success, there are cases where articles had been published for quite some time and yet when published to the customer community, comments started coming in pointing out needed modifications.

MathWorks has also seen increases in support engineer enthusiasm for knowledge sharing. "The engineers love it!" They are more likely to publish what they learn because of the greater visibility of the impact of their contributions. Some support engineers even spend their own free time answering questions within the support community. This effort is not specifically expected as part of their support activities; they just like to share what they know with others. In fact, support engineers and some support managers have achieved some of the highest community reputations.

Summary

In summary, MathWorks took the bold and innovative step of moving all support engineer content delivery into the community forum. To do this, they formed a cross-functional team who planned this transition carefully and addressed the concerns of both knowledge and community team members. Taking this approach has delivered incredible improvements in customer utilization of knowledge as well as record levels of customer participation in feedback activities.

Please visit the Consortium website for more information on the model below and how members are dealing with the intersection of support and social/communities.

About the Consortium

The Consortium for Service Innovation is a non-profit alliance of organizations focused on innovation for the support industry. The Consortium and its members have developed the KCS methodology over the last 18 years, and are committed to developing innovative ways to deliver customer support.

Case study developed by Melissa-Lynne Burch for the Consortium for Service Innovation

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