Consortium for Service Innovation™

MENTOR GRAPHICS
KCS℠ is a Team Sport

MENTOR GRAPHICS

Electronic design automation (EDA), providing software and hardware design solutions that enable companies to develop better electronic products faster and more cost-effectively.

THE CHALLENGES

- With a growing product base, the cost of solving the same problems multiple times became prohibitive.
- Measuring customer satisfaction globally was nearly impossible.
- Company sought an innovative way to differentiate itself from the competition in a specialized marketplace.
- Internal silos created barriers to cross-functional knowledge transfer.

WHAT THEY DID

- Introduced a Web-based support model as the primary source for customer queries and troubleshooting.
- Realigned the organization into cross-functional teams focused on Knowledge Centered Support and, ultimately, customer satisfaction.
- Established internal award metrics to drive team success.

THE RESULTS

- Realized up to 80% overall customer satisfaction.
- Increased customer reach tenfold.
- Supported expanded product lines and customer base without increased head count.
- Reinvested people skills in proactive areas to generate revenue.
- Garnered major industry service awards.

MAKING CUSTOMER SUPPORT A COMPETITIVE DIFFERENTIATOR

Mentor Graphics develops software for use in the design of complex electronic systems for the consumer electronics, automotive, and defense industries. Founded in 1981, Mentor Graphics (NASDAQ:MENT) has become a technology leader, offering more than 700 sophisticated Electronic Design Automation (EDA) products to customers in this $4 billion marketplace.

Mentor's support organization, the Customer Support Division (CSD), has become an industry leader as well, and currently generates about a third of the company's total business. "Mentor's award-winning support is clearly a competitive differentiator, but it didn't it happen overnight," said John Fronius, Director of Knowledge Systems at Mentor Graphics. "Customer Support's increasing success was accelerated by a company-wide transformation from a one-to-one reactive phone support model to a proactive eServices model based on KCS. That's Knowledge-Centered Support."

SOLVE A PROBLEM ONCE, USE A SOLUTION OFTEN

In 1983, two years after the company was founded, Mentor Graphics had three customer application engineers, or CAEs, supporting customers individually via the phone. A decade later, with a greatly expanded product line, the service organization had grown to 167 CAEs. According to Fronius, "Although we were winning awards for world-class phone support, helping each and every user individually —solving the same problem over and over—was very inefficient." As the company grew, measuring results became more difficult as well. "Our sales and support teams are located in 14 centers in four global regions," Fronius continued. "We were working with multiple customer databases and several unlinked call tracking systems, so,

as you can imagine, capturing global metrics was nearly impossible."

In 1992 Mentor Graphics introduced SupportNet for customer Web access and email, and two years later the company launched SupportNet-Pro, a technical newsletter which proactively alerted customers to workarounds, patches, and other critical information. To solve specific problems, however, customers still needed to speak with CAEs. Expanded product lines and a growing customer base further strained support resources.

By 2000, CSD was supporting several hundred complex products across 25 distinct product lines with 250 specialized CAEs. According to Fronius, "By that time we were looking for ways to leverage the knowledge of our support engineers and saw the solution in shifting from a reactive to a proactive focus." Mentor Graphics committed to developing a knowledge base and began moving toward a KCS framework. In doing so, they recognized the opportunity to make their customer support practice a competitive differentiator in the EDA industry.

CROSS-FUNCTIONAL FOCUS ON CUSTOMER SUCCESS

A key factor in the success of KCS at Mentor Graphics was executive sponsorship. "KCS is not a project or initiative," said Tom Floodeen, Vice President and General Manager of the Customer Support Division. "Instead, it's a shift in thinking around how we do business, with a true focus on our customers. It's about giving them fast answers when they need them, not

KEY BENEFITS

Lowered support to revenue margin by 40%

78% web based support success

Enabled global support teams

Expanded customer reach 10-fold

just when we are open for business; a KCS-driven eService model enables exactly that."

According to Fronius, "Tom had the vision and the commitment to make it work, and he got the support of our senior executives." Change management played a key role as well: consistent messaging, clear goal setting, and persistent execution eventually led to the division-wide adoption of KCS. "With such an intense focus on the customer experience and their success with self-service, the next logical step was to align functional resources to drive customer content." To increase flexibility, integrate responsibilities, and share resources, Floodeen brought together disparate groups into one organization under CSD. This included Knowledge Management, Technical Support, Technical Publications, and Educational Services – all groups working together to ensure customer success.

THE EVOLUTION OF THE SUPPORT ORGANIZATION

To help drive adoption of KCS, Mentor Graphics developed a matrix reporting structure, which includes three key roles. The first is the Worldwide Customer Support Manager (WWCSM). Today, each of 15 WWCSMs is accountable for one or more product lines, which entails customer satisfaction, product-specific web content, relationships with relevant product divisions, and worldwide team training for product support.

The second role is that of Contributing Editor (CE). CEs are actually CAEs with expanded responsibility. They ensure that the worldwide team for each product area is up to speed on KCS processes, tools, and systems. The CE identifies content gaps, works across functions to plug those gaps, and holds responsibility for processes surrounding the maintenance of product line content.

"The CEs are product champions and team leaders," said Fronius. "And because CEs have visibility, influence, and prestige, this role has become a new career path for our CAEs." Third, Knowledge Managers (KMs) work with CEs around the world to ensure teams are up to speed on the latest processes, tools and analytics for Knowledge Management.

With the new organization in place, Mentor Graphics focused on people, processes, and tools, developing worldwide teams where everyone is aligned by product. "The members of each team learned pretty quickly that they could rely on each other to help solve problems and share knowledge," said Fronius. "It's a beautiful thing when you come to work in the morning in Portland and see that someone on your product team in Japan has already solved a new problem overnight. An added benefit in all this—we've been able to free up our people to focus on higher value proactive activities like strategic account support, customer training, product quality, and of course, knowledge management."

To further develop cross-functional understanding, Mentor Support launched the Customer Support Division University (CSDU). The University offers technical training to all relevant functions across the company as well as to all regions. "CSDU has helped us melt down functional silos and break through cultural barriers to focus on what our customers need," said Fronius. "This has built relationships across teams that help to enable KCS activities throughout the year."

DRIVING CUSTOMERS TO SELF-SERVICE

In 2003 the company launched "SupportNet First" with a goal of migrating customers to their online support portal. "We didn't want to take away the phone," explained Fronius, "but we wanted to make customers aware

of the great content available on the site. SupportNet does not replace our people; it's just a different way to access their expertise. The customer is free to contact us via web or phone."

Once SupportNet had a critical mass— about 50% of customers using the Web for trouble-shooting— the company launched an aggressive marketing campaign to bring more customers to the site. "We made a commitment to provide faster response time to Web users than to phone users—maintaining two hours for the phone, and one hour for those customers who couldn't find what they needed on the site. Basically, we rewarded customers who tried SupportNet first. And we had great customer feedback."

CONTENT IS KING

Mentor Graphics spent two years improving SupportNet's integrated software platform so customers could search across all documents no matter what the source or format. Content available on SupportNet now includes TechNotes, Product Documentation, Application Notes and, increasingly, How-To & Tutorial Movies. With some 48,000 records currently indexed on the Web—500K pages in a variety of languages and formats— the company is now focused on maintaining accurate, relevant, and timely content. Taking a proactive approach, cross-functional teams look at upcoming events such as product releases as well as data from customer search results to see what content is needed.

But creating content is just the beginning. The bigger challenge is maintenance. "We've learned not to create content unless the customer actually needs it," said Fronius. "We're focusing on maintaining content with high usage." To measure usage, the company relies on a combination of surveys and web data. "Regarding metrics, we're still in our infancy," said

Fronius. "We're now looking at how to get more mature information into our feedback loops and the hands of our product support teams."

PUSHING THE COMPETITIVE EDGE

Since the implementation of KCS, the company has seen significant growth in number of customers and seats, and company revenue has grown over 40%, yet the support organization has maintained a flat head count and call volume. This has enabled the CSD to reinvest its people into proactive areas that generate revenue. The support group still handles about 5,000 service requests per month, but they now focus on the most complex questions. At the same time, Web searches now exceed 50,000 per month. "While knowledge reuse was the initial motive for embracing KCS," said Fronius, "we've found its real value in our customer reach. By publishing the right content, we've expanded our reach ten-fold, resulting in significant productivity improvements for our customers."

Today Mentor Graphics is poised for future growth and cross-functional collaboration. "SupportNet is currently responsible for 60% of the company's support activity. That's an increase of 85% in just two years," said Fronius. "Our success can be attributed to KCS practices as well as to our focus on constantly improving our service offerings so that our customers can find the answers they seek." Going forward, SupportNet is enabling Mentor Graphics to create new customer communities for its products. Using the Web for customer support gives users and opportunity to interact with each other and the company can invite customer input on new ideas.

WHAT GETS MEASURED GETS DONE

Historically, Mentor Graphics measured individual CAE performance by simply counting customer Service Requests. The company's Customer Listening Program evolved to include a "SupportNet Survey" which evaluates customer satisfaction with recent web-based support interactions. Now, instead of focusing on individual accomplishments, Mentor Graphics uses four quarterly team metrics. A team must satisfy all four criteria in order to win a quarterly award. Global teams don't compete with each other but, rather, with their own previous records.

- Web traffic growth measures the total number of unique users who query SupportNet before calling a CAE. Measurements are evolving to include customer adoption and repeat visits, rather than raw traffic.

- Troubleshooting success looks at customer satisfaction per Web visit. Teams are rated on whether the content is easily accessible and whether the customer is able to solve the problem. Results are based on customer surveys following each visit with a success target of 75%.

- Web response refers to the phone response time when customers do not successfully find a solution online—how timely is the response and is the customer satisfied with the outcome. The target is < 1 hour for 90% or more of the Service Requests.

- Overall satisfaction is based on a series of surveys—an annual mass survey as well as two channel-specific incident surveys, one for phone and one for Web.

Overall, the company has seen web-based support success rates as high as 78%. Troubleshooting has an average 68% success rate, with ratings for specific products as high as 80%. "Our internal awards are drivers for success," said Fronius. "They've fostered collaboration and have helped define worldwide teams. And our customers are happy."

To learn more about KCS and its relevance to your support team, visit

CONSORTIUM FOR SERVICE INNOVATION
www.serviceinnovation.org   info@serviceinnovation.org
650.596.0772