HP NonStop Customer Support
Knowledge-Centered Support™ (KCS) At Work

Complex Solutions Worldwide

The HP NonStop Customer Support organization is an essential part of the brand promise: they keep their customers’ mission-critical hardware and software systems running, nonstop, all around the world.

The HP NonStop Support team faces special challenges. First, their customers are sophisticated and demanding. This means that support engineers must be at their best and respond knowledgeably in each customer interaction. Continuous availability is expected. Second, the product suite is complex and dynamic. This means that new issues can come up quickly and the timeliness of support information is critical. Finally, because there are support centers worldwide it’s difficult for engineers to share what they’ve learned with each other through ad-hoc collaboration and “water cooler conversations.” This means it’s possible for the same complex issue to be resolved from scratch several times as different engineers and support centers work with different customers. This is expensive and redundant work!

Applying Knowledge-Centered Support

The HP NonStop Support team participated in the development of the KCS methodology with the Consortium for Service Innovation. Following a proof of concept in early 1999, deployment began midyear and was completed in 2000.

The goals were:
- Create a single knowledge base that would be used across all their locations
- Develop knowledge base content in the process of solving customer problems
- Share as much of this information as possible with customers as quickly as possible

Key Benefits
- Knowledge base content captured and published quickly (90% within 12 hours)
- Improved analyst skills
- Shorter time to relief
- Highly successful customer self-service

The Knowledge Challenge

It was clear to the HP NonStop Support leadership team that knowledge was an important tool in facing these challenges. They also recognized that leveraging support knowledge effectively requires more than a tool or technology—it requires the application of principles and practices in a consistent, thoughtful way.

Let’s use the example of building a knowledge base. The approach used by most organizations of having a separate knowledge authoring group, or taking engineers off-line to document content wouldn’t have worked for the HP NonStop Support group. Their issues require special expertise and need to be documented and available to customers rapidly. Additionally, the cost of taking senior support staff off-line would have been prohibitive.

The KCS processes involved 250 people across the world. With a balance of persistence and patience, the process of interacting with the knowledge base and creating structured solutions as part of the problem solving process has become part of the culture of the organization. KCS is not an additional or separate process—it is integral to how problems get solved within the HP NonStop Support organization.
### Applying the Principles at HP

The HP NonStop Support group has successfully applied the following KCS principles:

- **KCS training and certification.** The HP NonStop Support engineers are trained on the KCS practices and upon consistent demonstration of competency they get a KCS certification or license. This promotes consistency in solution quality.

- **Publishing content quickly to the web.** Licensed engineers have the right to create content without review by others. The engineers use a combination of judgment and criteria for technical review to determine the visibility attributes of the content they create. When a problem is resolved and does not require a technical review (most do not), a licensed engineer can publish content to the web for customer use. This is one of the key goals of KCS – solve a problem once and quickly make it available to as many people as possible to reuse as often as necessary.

- **Global community of knowledge champions.** The HP NonStop Support group created the KCS Council. This team consists of ten people representing each of the geographies and some of the key infrastructure support staff. The Council holds bi-weekly conference calls to discuss issues and improvements in the KCS practices. They discuss and implement all aspects of the KCS environment including: content quality, process improvement, metrics and technology issues. It is important to note that the KCS Council members not only represent the interests of the customer service engineers, they are customer service engineers in their respective organizations.

### Before KCS

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<th><strong>Before KCS</strong></th>
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<td>Authoring support content was time consuming and expensive — and as a result, didn’t happen very often</td>
<td>Knowledge is captured in the process of solving problems, making it easy to build up a base of 25,000 timely and practical solutions</td>
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<td>Customers, although technical and highly motivated to solve their own problems, didn’t have web-based access to support content</td>
<td>As much content as possible is shared directly and immediately with customers, empowering them with knowledge to both solve and avoid problems</td>
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<td>Globally dispersed support engineers might solve the same problem multiple times</td>
<td>A global knowledge base means problems get solved once and that experience is shared world-wide</td>
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<td>Because knowledge transfer was difficult, support engineers specialized in narrow areas, reducing efficiency</td>
<td>Support engineers, trained on the job by the knowledge base, become proficient faster and on a broader range of products and issues</td>
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### Sampling the knowledge base for quality.

The members of the KCS Council perform a random sampling of each of the engineer’s solutions in the global knowledge base. Using a 20 point scoring method, they provide each organization with an assessment of the quality of each solution created. The scores are sent to the employees with congratulatory and appreciative messages for high scores and constructive suggestions for improvements.

### Gathering customer feedback.

When customers are reviewing solutions on the web they have the opportunity to provide feedback on a 1-5 scale (5 = solved my problem). When a customer rates a solution a “5”, all the contributors to the solution receive an email alerting them of the rating. Feedback from customers through the web-based self-help is treated as a call. The HP NonStop Support group wants the customer experience on the web to be as good, if not better, than on the phone. When a customer makes a comment and asks to be contacted a case is created and treated as if the customer had placed a support call.

### Moving from management to leadership.

Recognizing that KCS is best managed by the people doing the work, HP NonStop Support leaders have empowered the KCS Council (individual contributors) to manage the KCS standards and processes. The leadership takes a balanced approach to measures. Activity measures like solution create, modify and reuse are used as a basis for discussion as opposed to being used to set arbitrary performance targets. Setting targets for KCS activities inevitably compromises the quality of the knowledge base. Performance assessment is done with a balanced view of activity trends, solution quality scores and customer feedback.

### Applying KCS Principles in Your Organization

HP isn’t alone in seeing these kinds of results from implementing KCS. If you’re interested in how Knowledge-Centered Support can help your organization, contact us:

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