

Published by The Association of Support Professionals

122 Barnard Avenue Watertown, Mass. 02472 Telephone 617/924-3944 Fax 617/924-7288 www.asponline.com Copyright © ASP 2008. All rights reserved. This report may not be reproduced without permission of the publishers.

Adaptivity and Empowerment, pp. 8-9

For many customers the most common support experience is searching a knowledgebase (KB) in the hope of solving a pressing, non-trival computer problem. KBs typically contain many articles that guide the user in complex troubleshooting. Users, however, often find these KB articles to be intimidating, arduous, confusing, and not truly attuned to their goals. To achieve excellence, support professionals need to dramatically improve this user experience. Two important avenues for doing so are designing KBs to be both **adaptive** and **empowering**.

"Adaptive" means that the KB article includes decision points that re-direct the user within the article based on the outcomes of the user's actions. This saves the user time and effort and builds confidence in the capability of the KB article. "Empowering" means that users can choose solutions based on their personal priorities. Let me explain this more fully.

A KB article works best when the article, in conjunction with the user, correctly diagnoses the user's problem and then directs the user to the most appropriate resolution procedure within the multiple procedures that comprise the article's solution space. Whether the user has diagnosed the problem or has merely identified a symptom of a problem, the user still expects the KB article to take the lead in proposing procedures ("treatments" for the problem). The article's title and list of symptoms support the diagnosis function (along with the Search facility and other access/navigation mechanisms that brought the user to this KB article in the first place). Within the solution space, the individual procedures are linked with decision points, both sequential and adaptive.

Very often the procedures in a KB article are linked in a thoughtful but fixed sequence: Try procedure A, then try B, then try C. Furthermore, very often the diagnosis phase only directs the user to the first procedure in the sequence. In some instances, however, the same problem could have been more elegantly addressed with adaptive decision points. Here the diagnosis phase would help pinpoint the precise nature of the problem and would then direct the user to the *most appropriate* procedure in the solution space—not necessarily the first one in the default sequence.

For example, if the diagnosis reveals that the user's problem matches Case B and if Procedure A is useless for Case B, the user should be sent directly to Procedure B. And an adaptive KB article should further redirect the user depending on the outcome of a procedure or a step within it. For example, a particular outcome of Step 3 in Procedure B may indicate that Procedure B should be aborted in favor of Procedure C. Users will recognize when they are being intelligently and productively redirected through a complex KB article, and it's likely that they'll feel a sense of delight.

Now let's consider empowerment. Merely adequate KB articles describe a single standard procedure based on balancing such factors as likelihood of success, time required, risk of creating additional problems, and varying outcomes (e.g., saving just the text of the document vs. saving the text and formatting). Empowering KB articles respect the user's individual priorities.

For example, imagine that Sam has a corrupt word processor file and is desperately trying to save the text of his novel. Sam is willing to follow every possible procedure and will happily settle for recovering just the ASCII text. On the other hand, Carmen is trying to save a much shorter document that is elaborately formatted. Carmen only wants to invest a limited amount of time in saving the document, and wants very much to preserve the formatting. A lengthy solution path that only saves ASCII text is a bad investment for Carmen.

An empowering KB article not only provides adaptive decision points but also explains the tradeoffs, so that Sam and Carmen can each conduct their own cost-benefit analysis and then pursue their individualized solutions.

This approach requires a deep technical understanding of the computer problem and is not easy to achieve; in some ways, it resembles the way a doctor develops a preliminary diagnosis and then quickly adjusts treatments based on the patient's evolving response to those treatments. But a knowledgebase that even comes close to this ideal is bound to be seen as dramatically more helpful at solving user problems than the "merely adequate" traditional approach.

Professor David K. Farkas, Professor, Department of Technical Communication, University of Washington, Seattle, Wash. E-mail: farkas@u.washington.edu.