The ERP Dilemma: "Plain Vanilla" Versus Customer Satisfaction

Customization of an ERP implementation can interfere with schedules and budgets, yet it makes users happier

By **Jeffrey W. Noyes**

A major dilemma faces any project manager responsible for implementing an enterprise resource planning (ERP) system: How do you balance schedule and budget goals against the benefits of customizing the ERP software? A recent EDUCAUSE Center for Applied Research (ECAR) study on ERP implementation projects[1] found that one of the most significant variables in determining project success is the degree of customization done to the system. The less customization, the more likely the project will be completed on time and on budget. The study also found, however, that with more customization, the user community is happier with the resulting capabilities of the system. Thus the ERP project manager is on the horns of a dilemma—does she minimize customization to maximize her probability of success? Or, does she allow more customization to maximize the long-term satisfaction of her user community?[2]

Mitigating Factors

Two factors can minimize the ERP dilemma for project managers and help reduce the constant tussle over customization requests during implementation. One is the advent of next-generation ERP systems, and the other is knowing the system's features well.

ERP—The Next Generation

The first factor in minimizing the ERP dilemma is the newer generation of ERP systems themselves. With them, you can have sprinkles on your plain vanilla.

These new systems have become increasingly rules-based, meaning the majority of enterprise-specific values, limits, and other parameters are entered into the system and maintained through the use of tables that can be accessed and maintained by the authorized, principal users of the system.

In many versions of older-generation ERP systems, most parameters of this type are "hard coded" in the programs making up the system and therefore require IT staff to change and maintain them each time a new release or upgrade is installed. In addition, when values were changed, the programs had to be recompiled and the entire system relinked. This usually required nontrivial amounts of system downtime. While some earlier ERP systems did have tables, they were not always easy to set up and use. Changing the programs was sometimes easier than using the tables. As ERP technology has matured, tables have become a valuable asset to all involved.

With the increased use, and corresponding increased ease of use, of tables in the newer generations of ERP systems, users can themselves design and actually enter most of the parameters that determine the business rules of the system for use at their institutions. This eliminates the need for IT assistance and the time-consuming system regeneration process.

Finally, when new releases containing fixes and upgrades need to be installed, the tables are not disturbed (except in the case of major system changes, which

occur fairly infrequently), and no special work is required by the user or the IT staff. Thus, the new table-based ERP systems allow greater flexibility (which could reduce customization) while not creating the ongoing burden of maintaining a locally modified system.

Know Your ERP System

The second factor is having a really deep and thorough understanding of both the functionality and capabilities of the ERP system to be installed and of the application(s) to be supported by that system. Generally, campus users and IT staff are not very familiar with the functional and technical details of a new system.

Frequently, during an ERP system implementation users will request a particular function that they have not seen (or do not remember seeing) demonstrated in the new system. The project team may approve it if they determine that the function has sufficient priority, and a customization of the new system results. Many times, however, a way (or several ways) to accommodate the requested function already exists in the baseline system through the use of its screens and tables, but lack of knowledge and experience with the system prevents the users or the IT staff from being aware of it. In these cases the approved customizations are not necessary.

Getting the Right Talent

A good way to deal with the problem of gaining in-depth knowledge of a to-

be-installed system is to engage a consultant. This person should have a strong background with the particular ERP system and module(s) being installed and the application at hand. It is also very important to engage the consultant for the duration of the implementation.

When a user requests a function, the consultant can first engage in a mini–process review and

- recommend an alternate best-practice solution,
- find a way (or ways) to accomplish the requested function through the use of the system's baseline screens and tables, or
- report to the project manager that a customization would in fact be required and recommend whether or not it should be implemented.

The final decision is up to the institution's project team, of course. Practical experience shows that, with this approach, most user requests can be accommodated using the baseline functionality of the new system. "Really necessary" customizations are nearly eliminated.

In addition, a consultant who is on site for the entire implementation of an ERP project will learn the culture, people, and particular policies and procedures of the host institution. This knowledge helps the consultant maximize the new ERP system's flexibility and minimize the customization. The consultant can even anticipate requests for customization and other issues and recommend solutions and alternatives before issues escalate or become critical.

Vanilla—and Sprinkles, Too!

Flexibilities provided in the newer generation of ERP systems and the use of a knowledgeable consultant over the life of an implementation project can

- minimize the customization required,
- maximize the satisfaction of the user base, and
- reduce the stress of a project manager facing the question of whether to customize.

These benefits minimize the ERP dilemma for an implementation project manager and increase the project's likelihood of success. *e*

Endnotes

1. R. B. Kvavik, R. N. Katz, and Associates, *The Promise and Performance of Enterprise Systems*, ECAR Research Study (Boulder, Colo.: EDUCAUSE, Dec. 2002).

2. Another factor the project manager must consider arises over the lifetime of the implementation: The ECAR ERP study also indicated that every dollar spent on customization during implementation results in a three-dollar cost each and every time that customization must be reinstalled in subsequent upgrades and releases of the system, which normally occur one or two times a year. While these costs do affect the implementation budget, they can significantly affect the ongoing operating budget.

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