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EDL WHITEPAPER

Best Practices for Product Configuration Projects

By Andy Campbell and Harinee Sampath, EDL Consulting

Abstract

Due to their criticality in generating sales, configurator implementation and upgrade projects must be executed with the greatest of care. The upfront requirements gathering and design, the technical aspects of the implementation and the overall project management process require the right mix of resources, a well-considered approach, a willingness to engage in process improvement, and robust testing and training.

Background

The product configurator is a key component of a company's eCommerce system, as it allows salespeople or customers to quickly build error-free quotes and helps to guide customers to the products that best suit their needs. EDL's expertise with product configuration — a key component in our spectrum of Inquiry-to-Cash solutions — helps companies reduce costs by streamlining the quote-to-fulfillment process by reducing configuration errors and lessening or eliminating the time and resources consumed by manual pricing.

Deployed properly, a configurator helps to increase revenues by making it easy to build accurate quotes for even the most complex products and add-ons. Configurators also enhance customer relationship management by establishing reliability and fast service for customers new and old.

Business Challenges

Selling and Salesforce.com support the creation of users and user roles. Though they differ significantly in handling the access policies, both are effective in managing this function. It would be cumbersome to manage user profiles in both products so it is essential that data migration from one product to the other is implemented. The migration allows the centralization of administration while allowing both products to utilize the data.

Requirements Gathering and Design Best Practices

In order to build a configurator that is maintainable as well as scalable, the proper levels of abstraction or common aspects must be set upfront. The user should not be overwhelmed with options at first glance — for example, when buying a computer, the first steps should not deal with technical specifications like the amount of memory or hard disk space. Instead, the end user's general needs (e.g., business, home or student) should be the first determinant, followed by the type of computer (e.g., desktop, laptop, netbook or tablet).

Setting the proper levels of abstraction simplifies the actual programming of the configurator and also improves maintainability as product offerings evolve over time. Subject matter experts — those who know the company's products inside and out — will be counted on heavily in this initial stage of requirements gathering and design, which will need to provide a sound foundation for future products.

Configuration rules should be kept as simple as possible in order to minimize performance impacts — and consideration should also be given to simplifying products and business processes themselves. In developing the rules for products, it is best to begin by configuring some relatively simple or straightforward products that are relatively easy to configure. By going live with these products first, the system, processes and people involved all learn to master configuration basics in preparation for working through more complicated products.

The output generated for salespeople by a configuration system should be in an un-editable form (such as portable document format [.pdf]) in order to preserve the integrity of the product configuration and

pricing. Sales staff will typically want to be able to output documentation from the configurator immediately for use as a proposal during sales pursuits, but the information must be "locked" in order to avoid the inadvertent creation of orders that cannot be fulfilled due to invalid configurations.

The overall implementation design should maximize the use of out-of-the-box features and minimize customizations to those that are absolutely necessary. For example, if the configurator allows a user to set up "favorites" to quote commonly ordered products, that feature should be used in favor of customizing the configurator to accomplish this by integrating with another system.

Implementation Best Practices

Best practices in development should always be followed. Lean code that minimizes database calls and works across different browsers will run smoothly and render properly for all users, both through the internet and mobile devices.

If there are configuration rules in place that prevent a certain type of configuration by a user,, any error messages displayed to the user must clearly guide the individual to resolution. Simply stating that a configuration is not possible will only stymie the user; error messages that explain the reason why the configuration is not possible and recommend next steps move the user closer to completing the sale or purchase.

Configurator Project Management Best Practices

As important as the "nuts and bolts" around configurators are, the implementation or upgrade of this crucial system must also be managed properly in order to remain on time and on budget — and to achieve the desired results.

EDL's experience is that adequate time is rarely budgeted for the subject matter experts (SMEs) for each product or product family. A full half of each pertinent SME's time should be dedicated to the configuration project. SMEs play an especially crucial role at the requirements gathering stage, which builds an understanding of how product options should be presented to the user.

Rather than trying to reproduce the current configurator during an upgrade, it is imperative to look for ways to simplify the business processes that are in place. Too often, convoluted spreadsheets and workbooks that were created many years ago and later adapted for eCommerce sites are kept in place for configuration even though today's systems offer much more robust capabilities in an easy-to-grasp form. The goal of this process is to make ordering easier for users by requiring fewer clicks and screens to close a sale.

Those concerned about the need for change management following process changes should bear in mind that better results are achieved when making multiple changes concurrently versus successive waves of change. The configurator project is already introducing change; any related process improvement that are made at the same time allow for a more efficient introduction of changes that employees will more readily grasp.

A detailed project plan, including dependencies and sequencing of tasks, is a must during any project, but project plan deviations tend to be more common in configuration projects. The entire team, along with the steering committee, must be kept abreast of any changes around go-live dates. The reasons for any delivery date changes should be documented to keep all parties aware of how the project is progressing and to enable learning opportunities for future projects.

Special care is required when integrating the configurator and eCommerce systems with other systems, such as CRM or legacy systems. Multiple integrations greatly increase complexity. Too often, the effort and time needed to integrate multiple systems is underestimated — this time must be accounted for in the project timeline. Internal experts on legacy systems must be staffed on the project. Allowing one integration to be set up in production before attempting the next one ensures overall stability of the system.

Testing the configurator and any new integrations requires dedicated quality assurance resources combined with automated testing. Expert resources should also be allocated to conduct user acceptance testing. The same SMEs who were leveraged at the requirements gathering phase should also be heavily involved in testing. Once the configurator has passed through testing, a train-the-trainer program can be implemented to introduce the new way of working throughout the organization in an efficient, orderly manner.

About EDL Consulting

EDL Consulting is a national technology firm specializing in eCommerce and CRM business solutions to improve business performance. EDL solves the complex systems integration issues behind state-of-the-art technology solutions to make organizations more successful. For more information about EDL Consulting, go to **www.edlconsulting.com**.