INTRODUCTION AND DEFINITION

This article discusses the uses and benefits of configurator/choiceboard systems, and how analysis of data from its use can be useful to the company having such a system. Dell and other companies have greatly improved, if not perfected, the art of product customization by using a system of choiceboards or configurators (used here as interchangeable terms) that allow consumers to customize their products. A popular term for what is being accomplished by the use of choiceboards is “mass customization,” a term that not long ago may have been thought of as an oxymoron. We always had “job shops” that produced to order for individual consumers or companies. However, relatively speaking, individual customization did not occur on a large-scale basis, and was quite distinct from what was called mass production, and surely, was not routinely available online even when there was first an “online.”

A choiceboard is essentially interactive online software that enables customers to choose a basic product and then customize it by selecting from a set of product features. For example, on Dell.com, the consumer chooses a basic computer system such as the E510 and then customizes it by specifying an operating system, memory capacity, monitor, video card, keyboard, etc. Each of these choices has an incremental price that increases or decreases the overall price. The base price combination is not necessarily the least expensive possible combination of features. If the consumer chooses a less costly feature than the option included in the base price/feature combination, the overall price indeed goes
down. The price is continually updated as the choices are made. Several choices offer only a yes-or-no response, with “no” indicating a choice of the default option. Features also may include services options such as shipping and warranty. Clearly, the choiceboard system does not offer an infinite number of possibilities. For example, Dell.com offers from two to five levels of hard-drive capacity.

Other companies that have made good use of this choiceboard approach include Travelocity.com and VermontTeddyBears.com along with many others, including automakers. Indeed, although the vehicle is generally purchased from the dealer, automakers report that the vehicle configurators and model pages are the most used sections on their Web sites. Configurators are also in frequent use in Business to Business (B2B) contexts when one business is ordering from another. In B2B, far more numerous options are presented and the Website design is too complex to be cost-effective in a B2C context.

Choiceboards can differ greatly in terms of what they offer. Some allow consumers to actually experience different options; a well-known example (although not usually thought of as a choiceboard by the consumer) is choosing a cell-phone ringtone. The consumer can sample each tone option for ten seconds or more. Lands’ End lets customers create custom clothing by providing pictures of clothing options and measurement information.

USES AND BENEFITS

A choiceboard system serves many purposes. First, it lets consumers customize their products or services. At one time, such customization was possible only for high ticket items like automobiles. Rather than buying a car off the dealer’s floor, customers have long been able to select a color along with other options—air conditioning, automatic or manual transmission, sunroof, etc.

There is clear evidence that consumers enjoy the opportunity to customize their products as long as the process is painless—ideally offering perfect orders and super service (FastCompany, 2000). A perfect order “…gets shipped on time and complete, and arrives at a customer’s desired location within a precise time window and in excellent, ready-to-use condition.” Super service has the flexibility to handle last-minute customer changes and still provide the same level of service. Consumers can balance priorities, deciding whether they care most about price, delivery time, or various special options.

A second use for, and benefit from, a choiceboard system is relatively invisible to the consumer: inventory control. Dell, for example, uses a pull-based system, in which customers initiate orders and only then do order processing, inventory decisions, and production kick in. This compares favorably to a push-based system in which a company decides what consumers are likely to want and delivers that merchandise to distributors and retailers months in advance of actual sales. This can leave stores with large inventories that end up moving only after the distributor offers rebates, dealer incentives, and giveaways. Dell’s pull-based approach has allowed it to integrate its production line with its suppliers, so that neither Dell nor its suppliers get overburdened—or underprovided—with inventory (Slywotsky and Morrison, 2000; Bharati and Chaudhury, 2004).

A third use and benefit of choiceboards is that they save money on labor costs. They also, by definition, eliminate most transcription (e.g., order taking) and other human errors. A seller’s Web site can potentially generate thousands of customer quotes per day, which can be delivered instantly, 24 hours/day, 365 days per year. All these are significant pluses. However, developing a choiceboard system is expensive, so the benefits must justify the cost. People who can write for the Web cannot necessarily construct choiceboard systems. All but the largest companies have to outsource that task, and it may not