

enterprise integrity



By DAVID McGOVERAN

B2B Success Secrets, Part V

It's time for a quick quiz. Does your business have strategic processes, meaning that your business just doesn't operate if these processes fail? Do any of them depend on the activities, decisions, products, or services of other business entities? You probably cannot give an informed negative response to these questions. (If you can, please tell me about it.) If you have strategic processes, it follows that, at each point in time, at least one business activity or task in each is strategic. The business suffers a costly failure if such a task or activity fails. Strategic business processes must be designed for robustness.

Robust business design ensures that strategic activities aren't susceptible to failure and there's no single point of failure. Single point of failure elimination, during business planning or operations, is crucial to robust business design. We must first understand how to recognize potential single points of failure. A business activity can be a single point of failure in two ways:

- The required result of a strategic process might depend on the completion of some single activity or task for which there is neither an alternative activity nor acceptable means to correct a failure. Alternative activities ensuring a desired result are closely related to redundant activities and resources (discussed last month). However, the alternative activity can also be fundamentally different. For example, an automated activity might also be achieved through manual means, or an activity normally performed by a business partner might be done in-house if the partner becomes unavailable (or vice versa). Even if a process is designed to have alternative activities, it can still reach completion without a successful result. An activity without an acceptable means to correct such failures is just as much a potential single point of failure as one that affords no redundancy or alternatives. An acceptable correction would be, for example, one that's neither too costly nor too time-consuming and that produces a result that's close enough to the original expectation. (This notion of "close enough" introduces the vast and crucial topics of analysis of acceptable risk and risk optimization; these are worthy of a little library research.)
- Successful completion of the activity may depend on some critical resource, making the activity susceptible to a

resource failure. Resource failures can occur, for example, because of limited or delayed supply, inappropriate tolerances, or poor quality. Resources can be predominantly reusable (such as capital equipment) or consumable. Although we tend to think of them as physical entities, there are many types of resources, including personnel, computing, energy, communications, financial, knowledge, and decision. Indeed, the special activities or tasks that determine the particular progression of activities in a business process instance depend on decision resources. Without robust decision-making abilities, any business process will eventually fail — usually with a high cost of recovery. Whether the activity in question is automated or not, a key type of decision resource is the business management team.

Removing single points of failure is especially important as applied to the business management team. Businesses often have insurance policies to cover the loss of a key executive and attendant loss of business. Most businesses try to have skilled employees who can temporarily handle the work of a particular executive. Still, I have yet to find a company with a "stand-by" management team (in case much of the team is suddenly lost), let alone a plan for problem detection and an effective switch to the stand-by team. The greater the team's scope of responsibility over business operations, the more likely that management team loss will result in a business interruption. For most businesses, the executive management team is a single point of failure; for larger businesses, so is a divisional management team. This argues for geographical dispersal of the management team (and other critical resources), even though dispersal creates communications overhead.

Much of this discussion has been abstract. Take time to think about these principles. You'll find plenty of business failure cases to analyze in any business magazine or newspaper. You'll discover that robust business-to-business design requires first robust business design and is essential to enterprise integrity.

David McGoveran is president of Alternative Technologies, Inc. He has more than 20 years' experience with mission-critical applications and has authored numerous technical articles on application integration. e-Mail: mcgoveran@alternativetech.com; Website: www.alternativetech.com.