

assistant. Similarly, physicians, lawyers, and other knowledge workers don't need computer-based systems to do their work.

That said, Knowledge Management, like most other business strategies, *can* have more powerful results—as measured by the bottom line—with the appropriate use of information technology. As illustrated in Exhibit 5.1, the organic or unassisted approach contrasts significantly with the technologic approach based on computers, databases, and applications. Although there is considerable overlap in the two approaches, key differences are in the transaction volume ideal organization size, scalability, type of knowledge involved, and initial cost.

A technologic approach to Knowledge Management has a much higher initial cost, is inherently more scalable, and can handle a much greater transaction volume than an unassisted knowledge worker. For example, whereas an unaided customer service representative might be able to handle perhaps 1,000 customer complaints a month, a technology-enabled rep might be able to cover thousands of customer interactions per minute. Because of the leverage provided by technology, such as a software robot (bot) that interacts with customers over e-mail, the rep can work in an oversight capacity. The bot can handle most e-mail queries, supplying answers culled from past interactions with live customer service reps, and, on the rare occasions when the system can't adequately resolve a customer's issues, can pass the customer on to a live rep.

Technology in support of Knowledge Management isn't necessary or even optimal in every instance. For example, if the issues that have to be dealt with are subtle and require a very rich knowledge of the area, an expert knowledge worker or knowledge analyst may be the best option. Similarly, although technologies supportive of Knowledge Management can be applied successfully to organizations of any size, extensive investments in technology are generally practical only in medium-size to large companies. The organic approach is generally more practical for small to medium-size organizations.