able online, on CD, and in a variety of digital formats, from e-books and audio on CD and downloaded from the web.

Companies like Charles Schwab successfully use self-managed online education to increase the productivity of its call center workforce and to improve its bottom line. However, regardless of the educational techniques and technologies used, the challenge most companies face is determining the increased value that knowledge workers bring to the company after experiencing the educational process.

Knowledge Worker Recognition

Part of the work in developing a loyal, dedicated workforce is establishing recognition and reward systems to encouraging knowledge worker participation in KM initiatives. Successful managers recognize that knowledge workers are motivated by a variety of factors, of which monetary compensation is only one. Even those primarily motivated by money usually can be encouraged to provide more value to the company by formally recognizing their contribution to the company's bottom line.

One challenge in recognizing the contributions of knowledge workers is that their contributions are often intangible. It may be difficult to quantify relative contributions of intellectual property because metrics are either inappropriate or subject to interpretation. For example, a programmer who contributes 20,000 lines of code to a project may add less value to the company than oner who contributes 2,000 lines of code in one-tenth the time, assuming the code provides the same functionality.

Overhead

Complying with a KM initiative can represent significant overhead in the daily life of knowledge workers. For example, a knowledge worker who is recognized as an expert decision maker may spend a quarter of his time meeting with a knowledge engineer to capture his decision-making