Chapter VI

Assessing Knowledge-Flow Performance

This chapter focuses on assessing organizational performance with respect to knowledge flows. We look first at several theoretical and practical bases for assessment and then discuss both knowledge value analysis and learning curves in some detail, including examples for illustration. The discussion then turns to examine computational modeling of knowledge flows, which includes a detailed example for practical illustration. The chapter concludes with five knowledge-flow assessment principles and includes exercises to stimulate critical thought, learning, and discussion.

Theoretical and Practical Bases for Assessment

In this section, we review several theoretical and practical bases for assessment of knowledge flows. We select only a few, diverse representative approaches for discussion, leaving more comprehensive research for the interested reader to pursue via the references cited here.
Change Management Approaches

In terms of theory and practice alike, KM is not as unique as many people assert. For instance, KM is viewed by numerous scholars as fundamentally oriented toward managing change (Davenport, De Long, & Beers, 1998). Business Process Re-engineering (BPR) research has addressed several important questions pertaining to managing change. For example, we have the benefit of results such as “tactics for managing radical change” (Stoddard & Jarvenpaa, 1995), revelations of “reengineering myths” (Davenport & Stoddard, 1994), insight into implementation problems (Clemons, Thatcher, & Row, 1995; Grover et al., 1995), measurement-driven process redesign methods (Nissen, 1998), and many others. Research on BPR has also produced numerous analytical frameworks such as those articulated by Andrews and Stalick (1994), Davenport (1993), Hammer and Champy (1993), Harrington (1991), and Johansson et al. (1993). Many cases of large-scale change have been studied (Goldstein, 1986; Kettinger, Guha, & Teng, 1995; King & Konsynski, 1990; Stoddard & Meadows, 1992; Talebzadeh, Mandutianu, & Winner, 1995) as well. Hence, KM has much to learn from BPR.

Preconditions for Success

Here we describe one BPR assessment approach — which is quite applicable to KM — centering on “preconditions for success” (Bashein, Markus & Riley, 1994). Through research on numerous re-engineering projects, three obstacles to large-scale change are noted (pp. 7-8): (1) lack of sustained management commitment and leadership; (2) unrealistic scope and expectations; and (3) resistance to change. Examine any KM project today, and you are very likely to encounter these same obstacles. Hence, the preconditions for success developed from investigation of BPR projects are very likely to apply also to KM projects. Eight preconditions for KM success are summarized in Table 1 for reference. Most such preconditions are likely to be self-explanatory and intuitive.

Experience to date suggests that preconditions 2, 5, and 7 (Realistic expectations, Shared vision, Appropriate people participating full-time) represent those absent or insufficient most often in KM projects. In terms of expectations (Precondition 2), KM is not a “silver bullet” and will not cure all organizational ills. However, enhancing knowledge flows can enable sustainable competitive