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INSIDE THIS ISSUE

- 2 Identifying and
maintaining knowledge
competencies

KNOWLEDGE COMPETENCIES

The software industry is hyper-competitive. Therefore, it is important for a software firm to hire only the best and the brightest. However, Microsoft also realizes that knowledge should not be static so it embarked upon a project to create a competency-based skills profile, known as SPUD, to track and enhance employee competencies.

Knowledge should not be static

In the mid 1990s the head of Microsoft's IT department hired Susan Conway to create the competency program. Conway, who had created similar competency-based programs at Computer Sciences and Texaco, soon created a pilot. SPUD (Skills Planning "und" Development) focused on those skill-sets and competencies required to stay at the bleeding edge of an extremely competitive industry.

The five major components of SPUD consisted of:

1. developing a structure of competency types and levels,
2. defining the competencies or skills,
3. rating the performance of individuals based on the defined competencies,
4. implementing the knowledge competencies in an online system, and
5. linking the competency model to training.

Within each of the four competency types - entry-level or foundation, local/unique, global, and universal - are two separate skill categories: explicit, which involves expertise in specific tools or methods, and implicit, which involves abstract thinking and reasoning skills. For example, knowledge of Microsoft Access is an explicit competency while problem solving can be considered implicit. Going into the pilot, Microsoft identified 137 implicit competencies and 200 explicit competencies.

Within each competency there were also four defined skill levels: level 1 – basic, level 2 – working, level 3 – leadership, and level 4 – expert.

STRENGTHS OF THE COMPETENCY MODEL

There are a variety of benefits to the competency model.

These include:

1. Better fit of employee to specific job.
2. Ability for managers to find the right employee more quickly.
3. Provides an organizational view of knowledge assets that is a valuable input into strategic planning.
4. Enables creation of detailed job descriptions so that #1 can be more easily achieved.
5. Enhanced ability to match employee to training offerings.
Training can now be targeted at specific skill gaps.
6. General overall improvement in competencies of the entire firm.

Theoretically, an improvement in the skill levels of individual

Microsoft's competency model contained 137 implicit competencies, 200 explicit competencies and four defined skill levels

employees should lead to an improvement of skill levels within the firm as a whole.

7. Improved employee morale as more offerings are targeted to specific employees.

8. Possibility that the model might become a vehicle for institutionalizing innovation. For example, Wi-Fi is a "hot" topic in 2005. Use of SPUD could force development of a competency in this area by requiring its presence in all job competency requirements.

It is obvious that the competency-based model described by Davenport (1997) has much potential if it is implemented properly and is generally accepted by all employees within the company.

WEAKNESSES OF THE COMPETENCY MODEL

The development of a competency-based model is necessarily time-consuming and a great deal of attention to detail is a prerequisite for its success. This requirement alone might be sufficient to rail-road its success. However, there are other weaknesses:

1. The person or persons creating the competency description might create an inaccurate description. They might not be privy to all of the requirements of the job or not familiar enough with the job to do provide an adequate level of detail.

2. Same job titles within different divisions might require different competency descriptions.

3. Job descriptions do change leading to the possibility of an out-of-sync or out-of-date situation with the competency database.

Maintaining a skills competency database is an expensive and time-consuming job.

4. It is sometimes difficult to assess and gauge implicit competencies within employees.

5. Online access to the competency database might enable managers to “raid” existing teams for members with desired competencies.

6. Individuals might feel that this information would be a violation of their privacy and/or limit their potential within the company.

There has been some controversy amongst researchers about competency mapping as well. According to Lindgren, Stenmark, Bergquist & Ljungberg (2001) descriptions of competence are fragmentary and atomistic. Competence is usually categorized beforehand in an ad hoc way with weak connections to both empirical data and theory. This serves to confirm the model of competence itself than the workers’ competence. Finally, regardless of the number of categories, competence profiles are static, indirect, and general descriptions concerning human competence. Competence profiles do not demonstrate whether workers actually use the competence in accomplishing work, i.e. the competence profiles are not rooted in work practice

*Competency descriptions
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CONCLUSION

A brief search of the literature as well as the Microsoft website could find no references to SPUD past 1997. Without further investigation it is difficult to know whether the pilot was indeed a success. Whether it was or wasn't successful is a moot issue, however. The idea of utilizing a competency model to increase the quality of human resources is taking root. According to a study by Byrne (2003) the return on investment in training and development was an 8.5% in productivity compared with a 3.5% increase due to spending on capital improvements. So, training is critical.

The Hartford uses a balanced approach that links the employee's business opportunity plan to the organization's operating plan (Keyes, 2005). Their developmental approach is centered on employee and supervisor relationships in the development and planning process.

Employees meet annually with their boss to discuss development needs. After the employee's performance review, the employee and supervisor will establish personal goals for the following years. Because the employee's plan is linked to the company's operating plan, it must then be determined which competencies the employee needs to successfully reach corporate business goals. Towards this end, all courses are mapped to a competency profile.

The Hartford corporate strategy is tied to training through what they call Prescriptive Learning Plans and Individual Learning

Plans. A Prescriptive Learning Plan is a series of events, not all taking place in the classroom. These may include going to conferences, visiting websites or reading white papers. It may also be reading a book or having a phone conversation with a subject-matter expert within the company. Ultimately, Prescriptive Learning Plans are tied to business needs.

The subset of events signed off on by a supervisor for an individual employee is called an Individual Learning Plan. Hartford uses a Balanced Scorecard approach to determine its business strategy. Balanced scorecard derived strategic plans are produced in flowchart form to ultimately create a strategy map. Ultimately, this business strategy is translated into result-focused training programs by the individual departments.

About Jessica Keyes

Jessica Keyes is president of New Art Technologies, Inc., a high-technology and management consultancy and development firm started in New York in 1989. She is also the founder of New Art Press, a publisher of technology and business books.

Keyes is a frequent keynote speaker on the topics of competitive strategy and productivity and quality. She is former advisor for DataPro, McGraw-Hill's computer research arm, as well as a member of the Sprint Business Council. Keyes is also a founding Board of Director member of the New York Software Industry Association. She has recently completed a two-year term on the Mayor of New York City's Small Business Advisory Council. She is currently a professor of computer science. She is the former editor-in-chief of CRC Press' *Information Management and Systems Development Management*.

Prior to founding New Art, Keyes was Managing Director of R&D for the New York Stock Exchange and has been an officer with Swiss Bank Co. and Banker's Trust, both in New York City. She holds a Masters of Business Administration from New York University where she did her research in the area of artificial intelligence. She

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A noted columnist and correspondent with over 200 articles published, Keyes is the author of 20 books on wide-ranging topics from competitive use of information technology to balanced scorecard.

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