

Competency-Based Human Resource Development Strategy

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This paper explores issues in developing and implementing a competency-based human resource development strategy. The paper summarizes a literature review on how competency models can improve HR performance. A case study is presented of American Medical Systems (AMS), a mid-sized health-care and medical device company, where the model is being used to improve employee performance and gain a competitive advantage. While there are numerous benefits from using behavior-based competency models, there are also some challenges.

Keywords: Competency Models, Performance Improvement, Organization Development

Competency-based practices are popular among large and mid-sized employers as an integral tool for talent selection, retention, and development. Competencies describe the skills, knowledge, behaviors, personal characteristics, and motivations associated with success in a job. Competency-based practices utilize a competency framework to align the strategic objectives of an organization with its key HR business processes. By applying a systematic approach of measuring individual competencies, it may be possible for an organization to build ongoing snapshots of the overall knowledge capital and skills portfolio of its workforce. Further, organizations may be able to utilize this information to perform individual and organizational analysis, reduce education costs, improve hiring practices, improve retention, improve human resources performance and developmental planning processes, and deploy its human capital more effectively.

Although competencies could be used in various HR functions, the focus of this paper is on staffing and selection, education and training, career development, and performance management.

Purpose Statement

The use of a competency method as the basis for human resource management has become widespread in the United States and is gaining a foothold in international HR practice (Athey & Orth, 1999). In today's competitive and constantly changing business environment, competency models may be able to help human resource professionals improve the skills set and efficiency level of their workforce to match changing market trends, in order to face competitive business challenges.

This paper highlights some of the major issues of competency-based strategy, with a particular focus on the development and implementation of competency models. The intended outcome of this literature review and case study is to build a conceptual framework for further research regarding the extent to which competencies could be applicable in various HR and HRD functions.

Theoretical Framework

Competencies have many definitions (see the Review of the Literature). A frequently used definition is, "A descriptive tool that identifies the skills, knowledge, personal characteristics, and behaviors needed to effectively perform a role in the organization and help the business meet its strategic objectives" (Lucia & Lespinger, 1999, p. 5). Ranging from selection, retention, and development to organizational strategic planning, competencies are used today in a wide range of functions within human resources (Rodriguez et al., 2002). However, the decision to introduce a competency model into an organization should not be made without due consideration. Organizations will need to devote a significant amount of time for planning and communication, data collection, change planning, and resistance management. This paper highlights some of the issues that HR and HRD professionals may come across while developing and implementing competency-based HRD strategy.

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Research Questions

The literature review and case study sought to highlight development and implementation issues of competency-based human resource development processes. Specifically, the study was guided by the following questions:

- What role do competencies play in the field of HRD?
- What should be the scope of application of competency models across many different HR functions?
- What are the challenges HR professionals may face while implementing competency-based HRD strategy?

Methods

Both computer-based and manual searches of published research articles were conducted. HR, HRD, IO psychology, and business literature were reviewed. The computer databases on ABI Inform, Business Source Premier, American Psychological Association, and the American Management Association were used to identify articles, dissertations, and book chapters that included analysis or discussions of the concept of competencies. The review also included examining various companies' reports, presentations, and material on competency implementation.

The case study evolved out of the involvement of the authors in working with managers in the target corporation (AMS) to create, implement, and evaluate a competency model. The organization has granted permission to include the information contained in this article.

Results

The literature review focused on the research questions posed. The review is organized according to the following categories: definitions of competencies; impetus for introducing competencies; and application of a competency-based HRD strategy—an American Medical Systems (AMS) case example. The AMS case study is further organized in three broad categories: development of competency models for various positions; implementation of competency-based strategy; and challenges that HR professionals might encounter while developing and implementing competency models.

Definitions

Some of the more frequently cited definitions of competencies, in addition to that offered in the Theoretical Framework section, include:

- “Competencies are underlying characteristics of people and indicate ways of behaving or thinking, generalizing across situations, and enduring for a reasonably long period of time.” (Guion, 1991, p. 335).
- “Competencies can be motives, traits, self-concepts, attitudes or values, content knowledge, or cognitive or behavioral skills - any individual characteristic that can be measured or counted reliably and that can be shown to differentiate significantly between superior and average performers, or between effective and ineffective performers” (Spencer & Spencer, 1993, p. 4).
- “A mixture of knowledge, skills, abilities, motivation, beliefs, values, and interests” (Fleishman, Wetrogen, Uhlman, & Marshall-Mies, 1995, p.10.1).
- “A knowledge, skill, ability, or characteristic associated with high performance on a job” (Mirabile, 1997, p. 21).
- “A written description of measurable work habits and personal skills used to achieve work objectives” (Green, 1999, p. 5).
- “A descriptive tool that identifies the skills, knowledge, personal characteristics, and behavior needed to effectively perform a role in the organization and help the business meet its strategic objectives” (Lucia & Lespinger, 1999, p. 5).

Impetus for Introducing Competencies

William M. Mercer Inc. (2001) identified the following as the most common drivers for introducing the use of competencies in an organization:

Strengthening HR process. Improve talent management process through integration of common practices. This could include using competencies to create more powerful recruiting and selection tools and/or training and career development grounded in the specific skills and competencies needed for success in a given organization.

Achieving cultural integration and organizational alignment. Maintain cohesion and alignment following a disruptive organizational change such as merger/acquisition activity, divestiture or downsizing. This typically involves using an organization-wide “core” competency model to give employees a clear, explicit picture of

behaviors that the future organization will require for success and will expect in organizational members and leaders.

Improving operational effectiveness. Build a competitive advantage by strengthening core competitive advantage by strengthening core operations. This entails using function-specific or job-specific competency models to “raise the bar” by identifying and reinforcing the behaviors that lead to top performance rather than simply evaluating behaviors required for average performance.

Driving organizational change. Fundamentally change the way an organization operates in a new business, new markets, new technologies, etc. This involves creating competency models for selection and development that define the future. It also involves identifying the skills and competencies needed in the new venture area that are not present in abundance in the current employees, traditional business, market or technology (Daniels, Erickson, & Dalik, 2001 pp. 70-77).

Implementing Competency Models

A synthesis from the literature and key opinion leaders in the target organization (including incumbents, supervisors, cross-functional teams, customers, and visionaries/thought leaders) points to the following suggestions for developing competency models:

- The need to implement the competency model strategy should be derived from a business need.
- Get the support and participation of top management for the development and implementation of the process.
- Educate and communicate to each member of the organization about the objectives, process, impact, and implications of the competency initiative.
- Leverage ownership of and commitment to the process by assuring employees that the competency-based strategy is relevant to and important for their jobs and for their career development.
- Include work content experts from different EEO groups to make the final model a true representation of the entire workforce population.

Challenges

The challenges facing the field of competency practice are both daunting and exciting; the opportunities for HRD practitioners to reinvent competency methods to meet the challenges of the future are significant (Athey et al., 1999). Organizations have many ways to build competency models and have several options regarding the application and measurement of those models. Based on the literature review, in order to utilize competency-based human development strategy efficiently, business leaders and HR practitioners need to make a number of fundamental decisions and may face several challenges. These challenges may include gaining leadership support for the new initiative; articulating organizational mission to the competency-based HRD approach; building a conceptual framework for the competency models; adopting appropriate methodology for competency model development; communicating the new initiative to the employees; and evaluating the results of competency based strategy on human resources quality improvement.

Application of a Competency Model—A Case Example

American Medical Systems, Inc. (AMS) is one of the world's premier urology companies, developing, manufacturing, and marketing advanced medical technologies. The company's core products set the standard for quality implantable devices and are regarded as effective therapy for patients suffering from erectile dysfunction, urinary and fecal incontinence, and urinary obstruction.

With the focus on business need, competitive challenges, and growing talent selection and development needs, AMS chose a competency-based strategy for human capital performance improvement. Competency models were developed by utilizing the Development Dimension International (DDI®) software, *Identifying Criteria for Success (ICS®)*, for various U.S. and international positions.

Development

Before implementing the competency-based initiative, AMS did a thorough needs analysis by having brainstorming sessions with HR and various other business functions, including global sales and marketing, engineering, manufacturing, customer service, and so on, and built the conceptual model to navigate on the way to the organization development goal, which was to improve the work performance and skills set of its human capital. Emerging from this process were the intended areas for implementing this strategic attempt:

- Competency-based leadership development process
- Behavioral-based interview practice
- Strategic succession management
- Career path and career development system
- Performance improvement and management

Once the purpose of the competency-based application had been identified, the logical place to begin the analysis was to look at the information AMS already had. That information included the type of business, product

mix, organizational structure, number of employees, mission and values, existing job descriptions, training materials, and performance management system. After reviewing background information and research, work content experts were identified. Work content experts were incumbents who were effective in their job, not necessarily superstars; supervisors; cross-functional team members; and visionaries and thought leaders.

The methodology selected to build models for various positions was driven by the ultimate purpose of competency application. The data collection methods included job analysis interviews, focus groups, and current job descriptions of the incumbents. The target population for critical incident interviews included job incumbents, cross-functional teams, supervisors and internal thought-leaders and visionaries.

Based on critical incident interviews, a questionnaire survey was conducted to ensure the validity and reliability of data. DDI software was used to prepare a detailed analysis questionnaire (DAQ). The DAQ was distributed to a random sample of 20% of the incumbents for a sample size of 430. The response rate was 60%. In order to ensure content validity, both importance and frequency of each job task and behavior were confirmed by the DAQ.

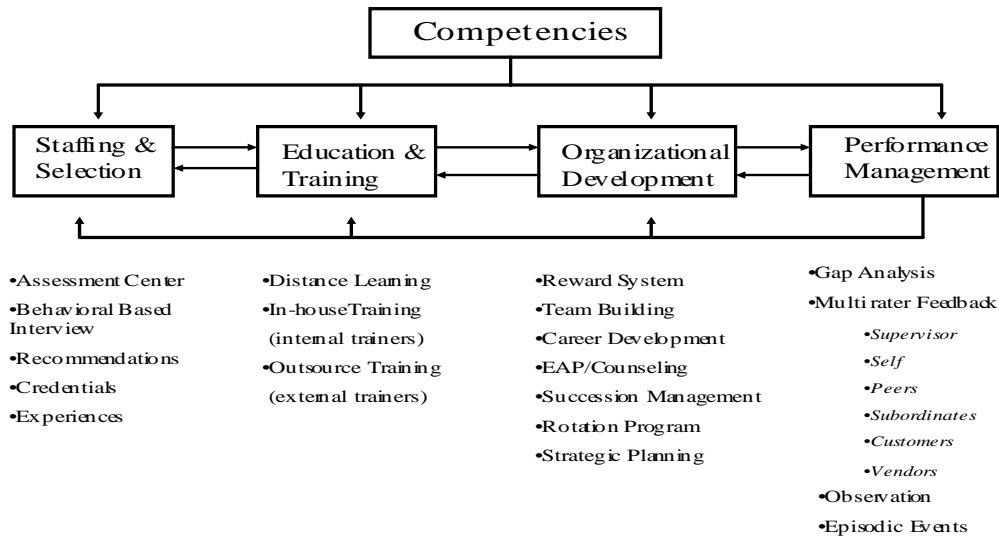
To validate the results further and to identify the importance rankings of competencies, a dimension (competency) confirmation questionnaire (DCQ) was distributed to supervisors and visionaries. DDI software was used to prepare the DCQ. The final competency model was a reflection of research data on a particular role gathered from current job descriptions, critical incident meetings, focus groups, and survey responses.

Statistical procedures were used to determine final dimension models for various jobs. The mean, or mathematical average, was used to determine the typical rating for a dimension or activity. For example, in the Dimension Analysis module, work content experts rated the importance of individual dimensions. A mean score was computed for importance of each individual dimension. Computing the mean score for each individual dimension in a dimension analysis answers the question, "On average, how important is this particular dimension to the job being analyzed?" Standard deviation calculations were used in the Dimension Confirmation phase of dimension analysis. These calculations showed how ratings given by different raters for the same dimension were similar to each other. Work content experts were also asked to provide ranking data in the Dimension Confirmation phase of a dimension analysis to help determine whether a particular dimension should be included in the final list of dimensions. Before any mathematical calculations were performed on the ranking data, they were converted to C scores—standard scores that have quasi-equal adjacent points on a scale. Converting ranking data to C scores not only placed the rankings on a linear scale, but also made comparisons of rankings between two different jobs reliable. Finally, in order to assess the content validity, before finalizing the dimension model, the comprehensiveness ratings were also determined by having work content experts (WCE) indicate the percent of job covered by the activities and/or dimensions covered in analysis (DAQ and DCQ). If WCEs selected "high" comprehensiveness rating that means they believed a person who performs acceptably in the dimensions and/or activities will be successful in the job being analyzed. If WCEs selected a "low" comprehensiveness rating, that means they believed a number of dimensions and/or activities important to job performance have not be included in the analysis or that there may be irrelevant dimensions and/or activities in the analysis. (ICS® reference manual, 2000, pp. 2-18)

Implementation

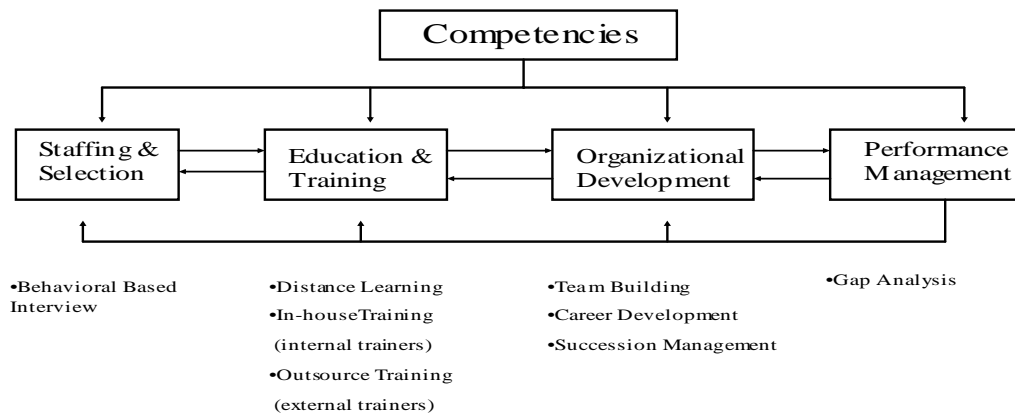
Today, HR executives and practitioners are faced with many new opportunities to utilize competency methods to improve individual, team, and organizational performance (Athey & Orth, 1999). The key concern is to leverage existing competency practices to have a significant and measurable impact on business results (Athey et al., 1999). At AMS, the implementation of competencies is still in its beginning stage. Early results indicate that the process is valuable and insightful. Figure 1 summarizes the competencies for human resource development.

Figure 1. AMS Competency Model.



The major issue that may occur while implementing the competency strategy is the scope of application of competency models across various HR systems. AMS adopted an incremental change strategy. Figure 2 summarizes the initial areas where competency-based applications are to be exercised.

Figure 2. Initial Areas of Competency-Based Application at AMS.

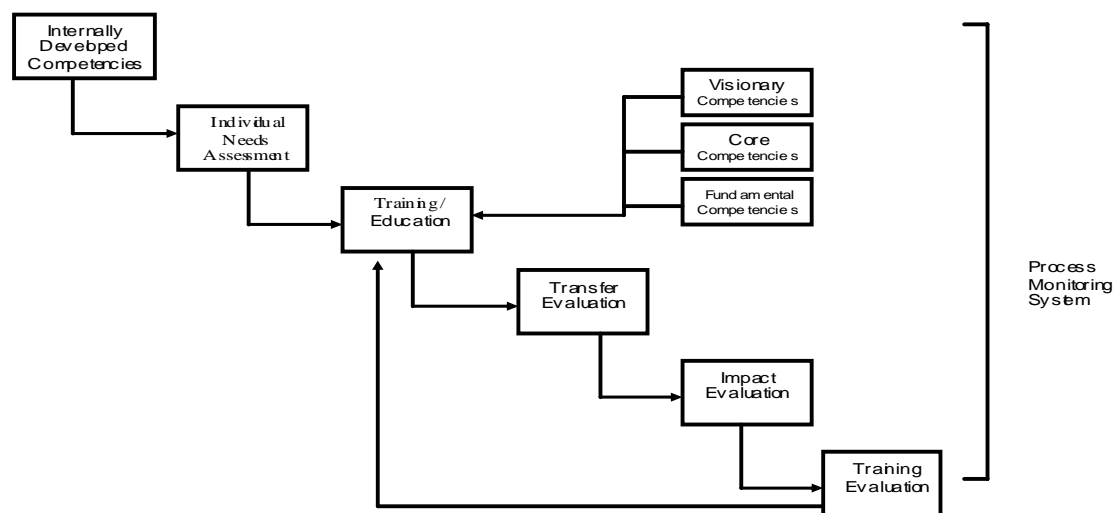


Staffing and selection. Many agencies are using competencies as the foundation for recruitment and selection (Rodriguez et al., 2002). AMS considered staffing and selection as the first step for implementation by putting a behavioral-based interview guide in place for the selection function. Interview guides were prepared based on competency models, using the benefits of DDI software. The competencies were divided into two broad categories: competencies that are relatively easy and those that are relatively difficult to coach. During the interview, more focus and higher weights were assigned to those competencies that are most critical for success in the position and to

those competencies that are difficult to coach. Using competencies as the basis for staffing provided the flexibility and assurance needed to select and place individuals where they can best serve the organization (Rodriguez et al., 2002).

Education and training. The education and training function was another area in which to leverage competency-based strategy. The implementation process began with an analysis to identify competency gaps. The result of the gap-analysis exercise was to identify competencies that current incumbents needed to improve. For training and education purposes, competencies were divided into three broad categories: fundamental competencies (essential competencies that all employees share across the board), core competencies (functional competencies that help perform the current job effectively), and visionary competencies (competencies that prepare an individual for the next level or future job). Various sets of online and in-house competency-based programs were designed. Specific emphasis was placed on training evaluation by developing training transfer and performance impact assessment systems. Figure 3 summarizes the competency-based education and training systems.

Figure 3. AMS's Competency-Based Training & Education System



Career development. The third application area was career development. Here, the competencies were used to identify the long-range potential of employees. AMS believes that high-caliber and high-potential employees who consistently exhibit effective leadership competencies will progress in satisfying career paths. This process will be validated and closely monitored against business results and performance evaluations, while competency-based training and education functions allow employees to enhance their leadership competencies. Formal competency-based training programs will be designed and conducted via classroom-based learning, computer and interactive video-assisted training, to e-learning. The aim of this initiative is to provide creative, convenient, and technologically advanced learning opportunities to employees to support them in their career development.

Performance management. The success of any company depends on how well it is able to align the goals and objectives of individual employees with the goals and objectives of the organization. A company can strengthen the connection between its strategic plan and the work the employees perform with a competency-based performance management system. The next step for competency implementation at AMS is performance management. Competencies provide the basis to identify performance gaps. Taking the lead from there, competency benchmarks will be used to anchor the rating scale for the multi-rater performance review process. These competency ratings will be combined with ratings on the achievement of other business results and goals.

Challenges Faced by AMS

Following are some of the major issues that AMS encountered while developing and implementing competency models.

1. What are the pressing strategic business needs that are driving the competency-based strategy?
2. Should AMS use generic competency models or develop its own?
3. How should key stakeholders and internal opinion leaders be involved in the process of developing and implementing a competency-based strategy?
4. How broad and extensive should the data collection be?
5. How much evidence is sufficient to justify inclusion of competencies in the model?
6. What should be the scope of application of competency models across many different HR functions?
7. How could a behavioral descriptors format best suit the implementation?
8. Who will drive the implementation?
9. What will it take to implement strategy successfully in terms of dollars?
10. What system will be used to evaluate and measure the impact of the competency-based initiative?

Contributions to HRD Knowledge

This literature review and case study contribute to HRD knowledge by examining the importance and applicability of a critical OD and performance improvement strategy. This study provides deeper understanding that, despite the impressive benefits; the decision to introduce competency models into the organization should not be taken without due consideration. Instead, organizations will need to be prepared to devote a significant amount of time for planning and communication, data collection, change planning, and resistance management. This paper opens new avenues for research, particularly in identifying numerous areas of competency-based strategy implementations.

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