USPTO Patent Full-Text and Image Database

| Home | Quick | Advanced | Pat Num | Help |

Bottom

| View Cart | Add to Cart |

Images

| **United States Patent** | **7,184,969** |
| **Bonnstetter , et al.** | **February 27, 2007** |

Position analysis system and method

Abstract

A method and apparatus for deriving key characteristics for superior performance in a job includes deriving a set of behaviorally-related competencies relevant to most jobs, surveying persons knowledgeable about the job based on the set of competencies, and defining the job in terms of the most significant competencies identified by the surveys.

Inventors: **Bonnstetter; Bill J.** (Scottsdale, AZ)**, Fronk; Susan J.** (Anthem, AZ)
Assignee: **Performance DNA International, Ltd.** (Scottsdale, AZ)
Family ID: 37769732
Appl. No.: 09/479,646
Filed: **January 7, 2000**

Related U.S. Patent Documents

Application Number	**Filing Date**	**Patent Number**	**Issue Date**
60115300	Jan 8, 1999		

Current U.S. Class:	**705/7.14**; 705/7.42
Current CPC Class:	G06Q 10/00 (20130101); G06Q 10/063112 (20130101); G09B 7/02 (20130101); G06Q 10/06398 (20130101); G06Q 30/02 (20130101); G06Q 10/0633 (20130101)
Current International Class:	G06F 11/34 (20060101)
Field of Search:	;705/7,8,11

References Cited [Referenced By]

U.S. Patent Documents

5551880	September 1996	Bonnstetter et al.
5574828	November 1996	Hayward et al.
5879165	March 1999	Brunkow et al.
6070143	May 2000	Barney et al.
6341267	January 2002	Taub
6556974	April 2003	D'Alessandro

      June 2003   Lautzenheiser et al.

Other References

Scott B. Parry, Just What Is a Competency?(And Why Should You Care?), TRAINING Magazine, Jun. 1998 issue, article beginning at p. 58 (5 pages total including magazine cover). cited by other .
Andrew L. Klein, Validity and reliability for competency-based systems: Reducing litigation risks, global computer network download printout, Copyright 1998, Infonautics Corporation, (11 pages total). cited by other .
Article from USA WEEKEND entitled Working Smart, Oct. 2-4, 1998, edition, pp. 4-5. cited by other .
LOMA's Competency Dictionary, cover page, inside cover page with 1998 copyright notice, and table of contents, and three pages therefrom (6 pages total). cited by other .
Stephen C. Schoonover, Competencies for the Year 2000, IA professional's Toolkit for Performance Development, The Schoonover Group, Cover page, inside cover page, page I with copyright notice of 1998, page iii table of contents, back cover page listing The Schnoonover Group as publisher, (5 pages total). cited by other .
Daniel Goleman, Emotional Intelligence, cover page and table of contents (3 pages total). cited by other .
Daniel Goleman, Working with Emotional Intelligence, cover page and table of contents (3 pages total). cited by other .
Bradford D. Smart, Top grading--How Leading Companies Win by Hiring, Coaching and Keeping the Best People, cover page and table of contents (3 pages total). cited by other .
Performance Skills Leader, Participant Package, Human Technology, Inc., HRD Press, 11 pages. cited by other .
Factsheet, DDI Development Dimensions International, Leadership Development Through Assessment Centers, copyright MCMXCIII, 2 pages. cited by other .
The Leadership Architect.RTM. Suite of Integrated Tools, Lominer Limited, Inc., copyright 1995, Michael M. Lomabrdo & Robert W. Eichinger, cover page, insider cover page, p. 1 table of contents, pp. 7-14 (11 total pages). cited by other .
Skillscape, Competency Manager.TM., cover page, inside cover page, three additional pages (5 total pages: 3318 Oak Street, Suite 19, Victoria, B.C., Canada V8X 1R1. cited by other .
Skillscape, Overview of Skillscape Competency Manager.TM., cover page, table of contents, and pp. 1-15 (17 total pages); 3318 Oak Street, Suite 19, Victoria, B.C., Canada V8X 1R1. cited by other.

Primary Examiner: Jeanty; Romain
Attorney, Agent or Firm: McKee, Voorhees & Sease, P.L.C.

Parent Case Text

I. CROSS-REFERENCE TO RELATED APPLICATION

This application claims the benefit of U.S. Provisional Application Ser. No. 60/115,300 filed Jan. 8, 1999.

II. INCORPORATION BY REFERENCE

The entire contents of U.S. Pat. No. 5,551,880, issued Sep. 3, 1996, are incorporated by reference herein.

Claims

The invention claimed is:

1. A method of evaluating potential job performance of applicants or existing employees for a specific job, comprising: (a) defining a set of competencies relevant to performance in the specific job; (b) ranking the set of competencies in order of importance for the specific job to provide a set of defined job characteristics for the specific job; (c) surveying a set of high-performing individuals in the specific job to ascertain if they possess the competencies specified by the job to validate the set of competencies defined for the specific job; (d) preparing a report regarding ranking of the set of defined job characteristics; (e) providing a set of proposed interview questions related to the set of defined job characteristics to assist hiring authorities to plan structured selection interviews; (f) surveying an applicant or existing employee regarding said job to ascertain how said applicant or existing employee demonstrates said set of defined job characteristics; and (g) reporting a comparison of potential performance of the applicant or existing employee for specific job based upon the applicant's or existing employee's demonstration of said defined job characteristics.

2. The method of claim 1 wherein the set of high performing individuals comprises one or more persons.

3. The method of claim 1 further comprising surveying a potential applicant for said job to derive how said characteristics relate to said potential applicant.

4. The method of claim 3 further comprising comparing the surveying of the potential applicant with the surveying of the set of high performing individuals.

5. The method of claim 1 wherein the existing employees include the set comprising employees in said job, employees subordinate to said job, employees superior to said job, customers interfacing with said job, and peers to said job.

6. The method of claim 5 further comprising surveying a set of existing employees regarding said job to derive how said existing employees demonstrate said characteristics relative to said job.

7. The method of claim 5 further comprising providing feedback to a said existing employee in said job based on the surveying of existing employees.

8. A method of evaluating potential job performance of applicants or existing employees for a specific job, comprising: (a) defining a set of competencies relevant to performance in the specific job; (b) ranking the set of competencies in order of importance for the specific job to provide a set of defined job characteristics for the specific job; (c) surveying a set of high-performing individuals in the specific job to ascertain if they possess the competencies specified by the job to validate the set of competencies defined for the specific job; (d) preparing a computerized report regarding ranking of the set of defined job characteristics; (e) providing a set of proposed interview questions related to the set of defined job characteristics to assist hiring authorities to plan structured selection interviews; (f) surveying an applicant or existing employee regarding said job to ascertain how said applicant or existing employee demonstrates said set of defined job characteristics; and (g) reporting a computerized comparison of potential performance of the applicant or existing employee for specific job based upon demonstration of the applicant's or existing employee's said defined job characteristics.

Description

III. BACKGROUND OF THE INVENTION

A. Field of the Invention

The present invention relates to a system and method of testing or interviewing persons for a particular job or work position, and in particular, to a system and method for improving the likelihood the person will perform highly in the particular job or assisting the person to increase performance in the particular job, particularly jobs that require human interaction.

B. Problems in the Art

It is difficult to accurately predict how successful a person will be in a particular job or work position. Traditional hiring practices involve reviewing a potential employee's resume and personally interviewing the candidate. Studies have found this a remarkably ineffective, or at least unpredictable, method of hiring highly performing individuals for particular jobs. For example, a recent university study suggests that while 90% of employees are hired by personal interviews, only 14% of those hired turn out to be highly successful in the particular job.

It is believed that the reason for the low success rate is due in part to human nature. Interviews have conscious or unconscious biases that effect judgment or ability to predict a success employee. Or interviewers do not know the important matters about the job and/or the person in relation to the job to effectively interview the potential employee. See, for example, Plotkin, Harris, "Building a Winning Team", Griffen Publishing, 544 Colorado Street, Glendale, Calif. (1997).

People have been using skills for selection of employees for years. However, they can not validate the process. They are biased and can not identify if they are measuring a skill, behavior or attitude, for example. If skills always led to performance, all CPA's, attorneys, medical doctor, nurses, engineers and artists would be successful. If intelligence always led to success, all valedictorians would be successful.

The behaviorist who has used behavior as a part of the selection process is biased and does not acknowledge the need to look at skills, intelligence, attitudes and beliefs.

The amount of people who understand and use attitudes for selection are biased and do not look at the other views either. Generally all the people who are involved in selection are biased and have trouble truly looking at a job or position the way they should be viewed. No one addresses the passions of individuals that can be met by certain jobs. Selection asks, "What does it take to be a key performer in a certain job?". While ways exist to measure talent, there has not been a way to be able to find a place to drop the talent in, i.e., match a job to the talent.

Numerous and increasing attempts have been made to create a system for hiring or identifying which persons will be successful for particular jobs. A number of testing systems have been developed and are in use. Many focus on the technical competency of the potential employee. Many focus purely on the behavioral characteristics of the employee.

One such system is described in U.S. Pat. No. 5,551,880 (incorporated by reference herein). This system extracts information from the potential employee through a questionnaire. In the case of this patent, the questionnaire probes the behavioral and value characteristics of the individual. Those characteristics are compared to behavioral and value characteristics that are exhibited by persons successful in the particular job. A computer can be used to keep track of the questionnaire answers, their ratings, and their comparison to standards, and a printout can be created which allows the employer to evaluate the potential employee to see if they match up with successful models for the job. Alternatively, the system can be used to test existing employees to see if they fit a job, or to help them improve in a job.

While the patented system described previously has been found to be a much better predictor of employee success for a job, there are still needs in the art. The previously described system is focused on the people and their characteristics. More emphasis, or at least significant emphasis on what characteristics the job requires, may lead to even better predictions of employee success.

There are currently discussions of "competency" for jobs. See, for example, Parry, Scott B., "Just What is a Competency?" June 1998 issue of TRAINING, pp. 58 63; Klein, Andrews, L., "Validity and Reliability for Competency-based system: Reducing Litigation Risks", Vol. 28, COMPENSATION & BENEFITS REVIEW, Jul. 17, 1996, pp. 31(7). While there is much discussion of competency, an effective way to measure the talent of a person and then find a job to maximize the talent of the person is not known.

Therefore, there is a real need in the art for an improvement regarding this question. It is therefore a principal object of the invention to provide a system and method that improves upon or solves the problems and deficiencies in the art.

The many attempts to shift the focus of inquiry from interviews and resumes to an evaluation of "competencies" of potential employees beg the question--how does one define "competencies" and which ones are relevant?

There is no agreement on these questions. Many attempts at using "competencies" mix hard skills, e.g. technical competencies, with what are sometimes called "soft skills", e.g. more behavioral related. Others come up with generalized, "one size fits all" approaches.

Some companies hire consultants to tailor competency models to a particular company or job.

The problems with present attempts include inaccuracy, biases, cost, and ineffectiveness. A "one size fits all" approach does not take into account that different jobs require different competencies. It also does not allow for differences in company goals or philosophies.

A significant problem in many present competency based systems is bias of the creator of the system. For example, no matter how experienced or educated, a consultant or system developer has patent or latent biases. They invariably show up in the definitions, questions, and processing of such systems. Also, a consultant many times is affected by what the consultant perceives as the desired outcome of the client.

Specific hiring of consultants is costly. Some charge several thousand dollars a day. A customized system for a company can cost tens of thousands of dollars. And, again, biases are likely.

Also, the effectiveness of present systems is questionable. Most are based primarily on the real or perceived needs of the company, and not upon the needs of the position. Therefore, many good candidates for effective or even superior performance in a position are not identified.

III. OBJECTS OF THE INVENTION

Therefore, there is a real need in the art for improvement in the way competencies are identified for good performance in a job or position.

The present invention provides a method and apparatus, which improves over or solves problems and deficiencies in the art.

Other objects, features and advantages of the present invention include, but are not limited to: 1. A focus on first defining a job by competencies and the most important competencies. 2. Utilization of such a defined job to (a) screen potential employees for the job, (b) evaluate existing employees in the job, (c) assist interviewer of job applicants ask the right questions, (d) develop employees, (e) develop strategies for matching employees to jobs, and/or (f) help with future business planning. 3. Has greater accuracy. 4. Is quicker. 5. Is economical. 6. Is more flexible. 7. Is reusable. 8. Diminishes or eliminates bias. 9. Assists in ultimate hiring decision. 10. Is adaptable to number of jobs/uses. 11. Can be computerized/automated. 12. Is useable with other methodologies. 13. Provides technology, methodologies and processes. for aligning the behaviors, attitudes and performance of individuals with organizational needs. 14. Identifies, calibrates and prioritizes the competencies required to produce superior performance relative to specific positions. 15. Includes a process for assessing an individual's performance against the competency requirements of their position. 16. Provides the framework for career development plans focused on developing the competencies required for superior performance. 17. Reinforces the behaviors necessary for superior performance. 18. Identifies the behaviors that may hinder superior performance. 19. Minimizes the time required to develop competency models. 20. Assists in the development of competency profiles that clarify job descriptions in terms of behavior. 21. Provides a job-related basis for coaching and mentoring. 22. Provides job-related links between the recruiting, selection and performance management processes for specific positions. 23. Can be implemented using paper and pencil, Intranet or Internet. 24. Provides methodologies for developing competency-based succession plans for key positions. 25. Provides the framework for tailoring training and development programs to individual needs. 26. Collects and interprets multiple inputs and perspectives on position requirements and performance issues. 27. Clarifies where training and development investments will be cost effective and where they may not be justified. 28. Provides insight into management or cultural biases on performance issues. 29. Provides information that can assist new hires to understand what behaviors they will need to demonstrate in a specific position. 30. Provides a framework for assessing the impact of internal

or external changes on the behaviors necessary for performance in a specific position. 31. Assists organizations to develop a baseline for an inventory of their current workforce competencies. 32. Provides a competency-based framework for workforce planning. 33. Provides objective, job-specific language for appraising performance. 34. Assists in the development of a competency-based compensation system. 35. Provides a methodology for clarifying the shifts in importance of soft skill competencies between positions represented in career ladders or within job families.

These and other objects, features, and advantages of the present invention will become more apparent with the accompanying specification and claims.

IV. SUMMARY OF THE INVENTION

The present invention comprises a system and method for analyzing a job or work position and then evaluating applicants for the position to determine if their characteristics will make them high performers in the position. The present invention is particularly useful relative to jobs or positions that have human interaction, either with persons inside the company, e.g. coworkers, or persons outside the company, e.g. customers, suppliers, etc.

First, a set or family of characteristics, herein called Competencies, specifically related to observable behaviors in the workplace for most jobs or positions is defined.

Second, one or more persons familiar with the position, and preferably highly performing individuals in the position, are interrogated regarding the Set of Competencies. Optionally, not only are the individuals queried for skills needed to have high performance in the job, but also the values/attitudes and others traits or characteristics that seem to match up with high performance in the job. Other characteristics that can be tested are risks involved individually or for the company with the job, beliefs associated with high performers in the job, and intelligence.

Third, the responses are analyzed from the standpoint of the interrogations. The manner in which the Competencies relate to a given job can then be analyzed. At least some Competencies are related to skills, attitudes/values, and/or behavioral traits. Risks could also have identified factors, as could others, if desired. Biases are dealt with or removed by using observable behaviors in a job to define the job and by surveying a set of high performers relative to these observable behaviors.

From those Competencies, essential Competencies for the particular job can be identified. They are correlated with skills, attitudes/values, and/or behavioral traits.

From this key Competencies identification, a plan of action can be developed to better interview and identify those candidates for the job that are most likely to be high performers. Specific questions for interviews can be fashioned. If the key Competencies are identified in the candidate, the candidate is likely to be a high performer, even if the resume or the personal opinion of the interviewer suggests otherwise.

Alternatively, the report can be shared with existing employees or workers to assist them to develop the Competency for a certain job, or to assist them to improve in the present job with a very specific development program.

V. BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a diagrammatic view of a system according to an embodiment of the present invention.

FIG. 2 is a flow chart of the method of using the system of FIG. 1 according to the invention.

FIGS. 3A to 3U are an example of a Position Survey used with the method of FIG. 2, including indicia to assist in an understanding of a method of processing the Position Survey.

FIGS. 4A and 4B are tables used in processing the Position Survey.

FIGS. 5A and 5B are tables used in processing the Position Survey.

FIGS. 6 A to 6AB are an example of a master Position Report used to create specific Position Reports for a variety of jobs or positions from results of a Position Survey.

FIGS. 7A to 7N are a hypothetical specific Position Report for a first job.

FIGS. 8A to 8P are a hypothetical specific Position Report for a second job.

FIGS. 9A to 9P are a hypothetical specific Position Report for a third job.

FIGS. 10A to 10P are a hypothetical specific Position Report for a fourth job.

FIG. 11 is a flow chart for an optional procedure for validating a Position Report.

FIGS. 12A to 12K are an example of a Personal Competency Inventory that can be used with the method according to the invention, including indicia to assist in an understanding of a method of processing the Personal Competency Inventory.

FIG. 13 are tables used on processing of the Personal Competency Inventory.

FIGS. 14A and 14B are a hypothetical example of a Personal Competency Inventory Report.

FIG. 15 is an example of a Feedback Survey for a person performing the job.

FIG. 16 is an example of a Feedback Survey for the superior to the person performing the job.

FIG. 17 is an example of a Feedback Survey for peers, subordinates, or others relative to the person performing the job.

FIGS. 18A to 18I are a hypothetical example of a Feedback Report for a Feedback Survey of FIGS. 15 17.

FIGS. 19A to 19D are a hypothetical example of an additional Feedback Report for a Feedback Survey of FIGS. 15 17.

FIG. 20 is an example of a hypothetical Interview Record for a first job applicant that could be used with the invention.

FIG. 21 is an example of a hypothetical Interview Record for a second job applicant that could be used with the invention.

FIG. 22 is an example of a hypothetical Interview Record for a third job applicant that could be used with the invention.

FIG. 23 is an example of a hypothetical Interview Candidate Comparison used with FIGS. 20 22.

VI. DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

A. Overview

The preferred embodiment will be described with respect to analyzing a potential candidate for a position or job in a company. It is to be understood that the invention can be utilized for a variety of types of jobs or positions, indeed for most.

A set of observable behaviors, identified as being pertinent to most jobs is defined. This Set of Competencies is used to an analysis of the job or position in question. A questionnaire called a Position Survey (see FIG. 3) is created by this analysis using the Set of Competencies. The questionnaire is taken by people (subject mater experts) who know the job at issue.

Based upon the answers to the questions, which probe a variety of Competencies, a profile of the job is produced. By having these in hand, the company can interview applicants to find out which persons have not only the skills for the job, but also the behaviors, values/attitudes, and risk level for the company.

This allows a set of interview questions to be produced to pull out information from the interviewee to allow an unbiased assessment of whether the interviewee not only meets skills requirements but also most likely has the passion for the job. Stated differently, it is a way to characterize the job, not by technical competency alone, but also by what might be exciting and stimulating to certain types of people. It allows an almost automated way (bypassing interviewer biases) of identifying the right persons for the right job. Because the questionnaire of several high performers provides the blueprint for the right person for the job, when the person answers certain questions the right way during the interview, the interviewer basically just watches for those "right" answers, and when received is compelled to hire the person, even if the interviewers biases suggest otherwise.

U.S. Pat. No. 5,551,880 looked at behaviors and values based on what persons saw in themselves. The present invention profiles the job in more of a complete sense; i.e. not only behavior and values, but also skills needed and optionally, the intelligence and any hard skills. Still further, the point of reference of looking at these different areas is from the needs of the job, not from how people rate themselves about the job. It is relatively easy to match a person's skills with a job, but what about motivation? Does that person have the passion to do the best in the job? Applicants sometimes do not know their own competencies or are reluctant to disclose their weaknesses. The present invention bypasses these problems with traditional interviews by profiling the job for high performance, and then subtly, probing the interviewee both head-on (for skills) and obliquely (behavior traits, values/attitudes) to see if the person has the passion to highly perform in the job, even if demonstrating good skills and aptitude.

B. Environment

The embodiment described herein is used to either evaluate potential employees for a position in a company, to evaluate a current employee in a position within a company, or to evaluate a job or position in a company so that a more effective strategy of obtaining correct employees or more correctly planning the future of a company can be accomplished.

The described embodiment utilizes what is called in the art a "competency model". Such competency models have been widely discussed in the literature. For example, see Boyatzi, Richard, "The Competency Manager: A Mode For Effective Performance", John Wiley & Sons. (1982); and Spenser and Spenser, "Competence At Work", John Wiley & Sons (1993). As discussed previously herein, existing competency models do not agree with one another; and more importantly, focus on deriving competencies, no matter how defined, of a potential or existing employee.

The present invention starts with a definition of competencies that is based upon behaviors and values such as are defined in the co-owned, issued U.S. Pat. No. 5,551,880. Thus, the competencies are founded in the soft skills or more intangible aspects of a person's inherent make-up, as opposed to education, work experience, or technical ("hard") skills. Secondly, the methodology is based on first characterizing the job or position, as opposed to the person being evaluated for the job.

The invention can be useful in a number of ways. It will be first described with regard to evaluation of potential employees for a job.

C. Definitions

Some definitions will assist in an understanding of this description:

"Position" means a job in a given organization.

"Position Survey" means an initial questionnaire given to persons familiar with a position to derive competencies deemed required for superior performance in such a position.

"Position Report" means a description of required competencies for superior performance for a position based

on the Position Survey(s), and can include discussion of approaches for identifying prospects for the position and interviewing such prospects.

"Personal Competency Inventory" means a survey intended for a potential employee for the purpose of evaluating the potential employee's competencies related to the position.

"Feedback Survey" means a survey intended for any or all of an existing employee, an employee's superior(s), that employees peer(s), that employee's subordinate(s), or others having some relationship with the position.

"Feedback Report" means a description of the results from one or more "Feedback Surveys".

"Interview Record" means a form useful for an interviewer relative to an interviewee.

"Interview Candidate Comparison," means a form for an interviewer to help compare a plurality of interview candidates.

"Competency", as used herein, means a behaviorally-related observable characteristic in the workplace relative to a particular job from the Set of Competencies defined herein.

"Set of Competencies", as used herein, means a specific family of Competencies.

D. Apparatus

FIG. 1 illustrates a basic apparatus for using the system 10 according to the invention. A computer 12 would include software 14 and text files 16 stored in a database. Computer 12 is capable of processing multiple Position Surveys 20, Personal Competency Inventories 22, and Feedback Surveys 24. Each of surveys 20, 22, and 24 can be in electronic form, accessible to a potential employee at a computer terminal, either near computer 12, or at a remote cite. A communications network 16 (modem, Worldwide Web, Intranet, etc.) can be used to communicate electronic versions of these surveys.

Computer 12 processes the surveys according software 14 and can produce several types of output reports.

A computer can be used to more efficiently process information according to the invention. Appropriate hardware is within the skill of those skilled in the art.

U.S. Pat. No. 5,551,880 discloses ways in which the system of the present invention could be practiced, including its computerization and the use of questionnaires, the coding and numerical characterization of the codings, and thus the ability to process the information with a computer, and provide an output report.

Software can be developed, as within the skill of those skilled in the art, by following this description.

As illustrated in FIG. 1, a Position Report 30 is possible, based on Position Survey 20. A Personal Competency Inventory report 32 can be produced based on Personal Competency Inventory 22. A Feedback Report 34 could be produced based on Feedback Survey 24. These are each described in more detail later.

Additional reports could be created such as a comparison of Position Survey 20 with Personal Competency Inventory 22 (see reference numeral 36). Similarly, comparison of Personal Competency Inventory 22 (see reference numeral 36). Similarly, comparison of Position Survey 20 with Feedback Survey 24 could be produced (see reference numeral 38). Still further, other types of reports can be created as will be appreciated.

A communication network 18 can also be used to electronically transmit such reports to a desired location. For example, e-mail, modem, Worldwide Web, Intranet, etc. could be used to electronically communicate any of the reports to a remote site for display on a computer or printing of a hardcopy.

Subject matter experts could take Position Survey 20 at a personal computer and submit to an employment agency in city A. Computer 12 could be located in city B. A potential employer could be located in city C. The potential employees, taking a Personal Competency Inventory 22 in city A could have it transmitted to

computer 12 in city B. Computer 12 could issue a report and send it electronically to city C for use by employer, comparing potential employee to the Position Report.

E. Methodology

Behind the surveys and reports created to define the Competencies related to superior performance in a job the identification, definition and selection of a family of Competencies referred to herein as the Set of Competencies. As previously discussed, much has been written about "competencies". However, no agreement exists as to what is a competency.

A standardized set, the Set of Competencies, is established. The Set of Competencies have also been derived from studies of foundational work on competency, and on foundational work relating to behaviors and values/attitudes. This is described in U.S. Pat. No. 5,551,880.

Presently there are all sorts of definitions of what comprises a "competency" related to jobs or performance. As used herein, the Set of Competencies is selected as being almost universally relevant to most jobs or positions in the workplace. By relevant it is meant that across the universe of potential jobs and positions, these are usually possibly relevant, either as being very important to a job, somewhat important, or not important. It is to be understood that sometimes determining what is not important for good performance in a job, can be very valuable to accurately defining the job.

As can be appreciated, the Set of Competencies does not directly relate to resumes, education, technical experience, or prior job experience. They are "soft skills", or in other words, "demonstrable, observable behaviors".

(1) Set of Competencies

"Set of Competencies", for purposed herein, means the following Competencies with the following meanings: 1. Leadership/Management: Achieving goals and objectives through others. 2. Employee Development/Coaching: Facilitating and supporting the professional growth of others. 3. Team Work: Working effectively and productively with others. 4. Conflict Management: Addressing and resulting conflict constructively. 5. Inter-Personal Skills: Effectively communicating, building rapport and relating well to all kinds of people. 6. Problem Solving/Decision Making: Anticipating, analyzing, diagnosing and resolving problems. 7. Creativity/Innovation: Adapting traditional or devising new approaches, concepts, methods, models, designs, processes, technologies and systems. 8. Written Communication: Writing clearly, succinctly and understandably. 9. Customer Service: Anticipating, meeting or exceeding customer needs, wants and expectations. 10. Flexibility: Agility in adapting to change. 11. Goal Orientation: Energetically focusing efforts on meeting a goal, mission or objective. 12. Planning/Organizing: Utilizing logical, systematic and orderly procedures to meet objectives. 13. Diplomacy: Effectively handling difficult or sensitive issues by utilizing tact, diplomacy and an understanding of organizational culture, climate and/or politics. 14. Personal Effectiveness: Demonstrating initiative, self-confidence, resiliency and a willingness to take responsibility for personal actions. 15. Presenting: Communicating effectively to groups. 16. Negotiation: Facilitating agreements between two or more parties. 17. Persuasion: Convincing others to change the way they think, believe or behave. 18. Empathy: Identifying with and caring about others. 19. Continuous Learning: Taking initiative in learning and implementing new concepts, technologies and/or methods. 20. Futuristic Thinking: Imagining, envisioning, projecting and/or predicting what has not yet been realized. 21. Decision Making: Utilizing effective processes to make decisions. 22. Self Management: Demonstrating self-control and an ability to manage time and priorities. 23. Management: Achieving extraordinary results through effective manage of resources, systems, and processes.

Therefore, the Set of Competencies, here twenty-three of them, are specifically defined. As can be seen, each have a directly behaviorally- or attitude-related aspect.

The Set of Competencies is used in the system of surveys and reports to assist in defining the behaviorally and attitude related characteristics of a wide variety of jobs as follows.

(2) Position Survey

To provide a standardized system for first defining behaviorally-related Competencies for most jobs, a standardized Position Survey 20 is created. An example is shown at FIG. 3. It is constructed as follows.

An introductory page (FIG. 3B) is for administrative use, for example, calling for a job code, company name, title of the position, and nature of position. It also calls for information about the respondent, the person filling out the Position Survey, including identification of Respondent and a code. Coding of the position and the Respondent helps facilitate computer processing and tracking.

Instructions, both at an introductory page (FIG. 3C) and continued throughout the Position Survey, key the Respondent to answer based not on how they think they perform in the position, or how they would like to perform, or even how they think they or others should perform; but rather on what the position requires for superior performance.

Some non-behaviorally-related factors can be elicited in a first section (FIGS. 3D E) of questions which surveys the type of authority, responsibility, accountability, consequences, and risks associated with the position. This information can be very helpful in evaluating or defining a position.

A second section (FIGS. 3F L) is directed towards behavioral requirements for the position. The questions are specifically constructed to elicit from a Respondent the type of observable behavior(s) that are deemed important in the position, and more specifically, the questions are specifically constructed to elicit the type of Competencies, from the Set of Competencies, the Respondent feels are required for superior performance in such a position.

A third section (FIGS. 3M 3U) is directed at situational events for the position, but is specifically constructed to also elicit information from the Respondent about Competencies, from the Set of Competencies, required for superiors performance in such a position.

The way in which the Competencies are elicited from the survey is as follows. At least some of the queries of Sections 2 and 3 of the Position Survey 20 of FIG. 3 are pre-coded. This is indicated by the handwritten letter/number combination to the right of some of the answers to the questions of Sections 2 and 3 of Position Survey 20 (FIGS. 3F U). The hand-written letter/number combination(s) do not appear on Position Surveys given to Respondents. The correlation of those codings are stored in computer 12, so that computer 12 knows which questions of Position Report 20 are related to which Competencies.

Therefore, the answer given by a respondent to any such question implicates such Competency(ies).

Position Survey 20 is preferably given to one or more persons that clearly understand the position at issue. Preferably, these persons are selected who are themselves high performers or perform at a superior level in the position.

FIG. 3 sets forth one such example of Position Survey 20. This is one example only and is by no way a limitation on what a Position Survey could contain or its format or content.

As also indicated by hand-written letters relative to certain questions in the Position Survey, the Position Survey can use the methodology of U.S. Pat. No. 5,551,880 to simultaneously probe the Respondent for behavior and value characteristics relative to the job. Hand-written letters to the left and below certain questions (D, I, S, or C) are the same as disclosed in U.S. Pat. No. 5,551,880 and reference can be taken to that patent for ways in which such can be processed. Computer 12 knows which questions from the Position Survey relate to which behaviorally-related factors from the methodology of U.S. Pat. No. 5,551,880.

Likewise, the handwritten letters (Identified with T, U, A, S, I, Tr), the attitude being measured, to the right and below certain questions in FIG. 3 sections 2 and 3 are the same or similar to the values coding set forth in U.S. Pat. No. 5,551,880. Computer 12 would be programmed accordingly.

Thus, Position Survey 20 is pre-designed to present a Respondent with queries, some of which directly relate to the Set of Competencies.

A Respondent goes through the Position Survey, and if he/she follows the directions, will answer the queries

accordingly. The answers can be electronically recorded. However, it could be manually filled out.

(3) Processing the PS

The responses to Position Survey 20 are processed as follows.

The questions in the first section (FIGS. 3D 3E) are also pre-coded in computer 12 (shown by hand-written letter/number combinations (to the right of certain queries). FIG. 4A shows the scoring key for the first section. If a Respondent places a check in the blank next to a query that has B1, that element is rated by computer 12 as being "slight", that is, slightly relevant to the position. A check for a query coded B5 would be rated "major", of major relevancy to the position.

Similarly, codings P1 to P5 and A1 A5 are handled in a similar way. Queries coded to B1 B5 relate to the job element accounts for results. Queries coded P1 P5 are related to the job element results through people. Queries coded A1 A5 are related to the job element authority.

As shown in FIG. 4B, the answers of the Respondent to section 1 of the Position Survey can be combined into a rating for each of the job elements "Responsibility for Results", "Responsibility for Result Thorough People", "Authority", and "Organizational Risks". These ratings can complement Competency and/or behavior/values ratings in defining the job and assist in the selection process and performance management.

The second and third sections of a Position Survey of FIG. 3 are evaluated and processed as follows. First, the questions from those sections relate to each of 23 competencies from the Set of Competencies. This is indicated by the hand-written numbers placed to the left side underneath the questions of Sections 2 and 3. These numbers reflect the competency or competencies being evaluated by each questionnaire to the numbers in the list of the Set of Competencies previously given. Again, the hand-written numbers placed near the questions of sections 2 and 3 of the Position Survey of FIG. 3 are to allow an understanding of how different ones of the questions are coded relative to different Competencies. The hand-written numbers would not appear on the Position Survey, but would be stored in computer 12 and correlated to the relevant questions.

Each taker of Position Survey 20 will answer all the questions related to each of the 23 of the Set of Competencies. FIG. 5A illustrates an example of the distribution of the nine questions per each of the 23 Competencies throughout sections 2 and 3 of the Position Survey.

The Respondent would answer each of the questions of sections 2 and 3 by indicating a value between 1 and 5 (see FIGS. 3F to 3U). Depending on those answers, each of the 23 of the Set of Competencies will be ranked by the survey taker between a ranking of "essential" to "not necessary" in Section 2, in between a ranking of "extensive" to "very little" in Section 3. Points are assigned to each answer. For example, if the answer to question 1 is given as "essential", having a numerical value of "one" in Position Survey 20, a coding numerical value of "six" is given meaning that it has been given the most importance. If a "two" is circled, it is given a point rating of "five" and so on, so that if a "six" rating is circled, the numerical value is "one".

The most points available for a given competency would be 54 (nine questions times six possible points). The least value would be 9 (nine questions times one).

In this manner, software 14 of computer 12 can calculate which of the 23 competencies is ranked between "very important" and "not important" by the survey taker in the following manner.

If a Competency receives a score greater than 83% of the maximum score of 54 (that is, a score of 45 or more) is then ranked as "very important" for the job. Any Competency receiving a score of between 51% and 82% of possible 54 points (that is, a score of between 28 and 45) is rated as "important" for the job. Competencies scoring 50% or under of maximum possible score (under 28 points) are ranked as "not important" for the job.

It is also to be understood that many of the questions in Position Survey 20 are intentionally derived from behaviors or values/attitudes as described in detail in U.S. Pat. No. 5,551,880. Hand-written codes are set forth in FIG. 3, Sections 2 and 3, indicating correspondence of certain questions to behaviors and values (see

FIG. 5B for summary of how behavior and values codings are distributed between sections 2 and 3 of the Position Survey of FIG. 3). Letters to the left below questions and Sections 2 and 3 indicate relationship to values coding (T, U, A, S, I, Tr) according to the U.S. Pat. No. 5,551,880. Letters to the right below questions and Sections 2 and 3 of FIG. 3 relate to values coding from U.S. Pat. No. 5,551,880. Thus, an interface between questions of Position Survey 20, and the Set of Competencies, and the behavior/values of the U.S. Pat. No. 5,551,880 are utilized. By this combination, we can determine fi the competency comes from nurture or nature.

Reference can be taken to U.S. Pat. No. 5,551,880 regarding how questions are coded, processed, and scored relative to behaviors and values.

Thus, a set of Respondents (one or more, preferably one to ten) who have knowledge about the position (preferably are high performers) take the Position Survey and define the job by the correlation of queries in the Position Survey to the 23 Competencies of the Set of Competencies.

(5) Position Reports

FIGS. 6 10 illustrate Position Reports 30. FIG. 6 will be called a Master Position Report because it contains basically a complete listing of all the possible text files that could be utilized for each of the 23 of the Set of Competencies. It also shows the basic format for Position Report 30.

The Position Report is created by computer 12 from the results it processes from the Position Survey. Computer 12 can process a Position Survey from one Respondent or integrate Position Surveys from a plurality of Respondents.

A description page (e.g. FIG. 6B) explains the Position Report.

Then, a hierarchy of competencies is set forth (FIG. 6C). This is simply based on which of the 23 of the Set of Competencies receives enough points to fit into the "very important" class, "important" class, or "not important" class. The viewer of Position Report 30 can then quickly see which competencies are deemed very important, important, or not important for the job.

Secondly, Position Report 30 can include a section called "Distribution of Competency Rankings" (FIG. 6E). Each respondent to Position Survey 20 would have a ranking in order of importance of the 23 competencies, which would be shown in this distribution. Discrepancies between different respondents could then be evaluated. It could point out certain competencies are indeed less important relative to others. It could also show a discrepancy that would assist in understanding of the position or create questions that could be evaluated to see if there is a reason for any inconsistencies.

Third, the report can contain "key characteristics of the position" (See FIG. 6F). This is related most directly to Section 1 of Position Survey 20, as previously explained with respect to FIG. 4B.

Thereafter, text files from text file 16 are available to construct a "Summary of Top Competencies" (FIGS. 6G to 6M). In FIG. 6, all text files for all of the 23 Competencies are set forth to show the different summaries for each Competency. In an actual Position Report, only a few of the Competencies would normally be reported. It is believed that five to seven of the highest ranked competencies is all that is required to give a good characterization of the position.

Finally, FIGS. 6O 6AB show the set of text files that are available to create behavioral interview questions. Such questions would give an interviewer the type of questions needed to find out or verify whether a job applicant fits the Competency model of the position defined by the Position Survey.

FIGS. 7, 8, 9, and 10 are hypothetical Position Reports 30 for four different jobs; namely, an automobile salesperson (FIG. 7), a vice president of marketing (FIG. 8), a computer programmer (FIG. 9), and a customer service representative (FIG. 10). As can be seen in comparing FIGS. 7 10, the hierarchy of competencies varies for each. For example, the automobile salesperson report 30 has only one "very important" competency common namely customer service. However, looking at the distribution of competency rankings, the two respondents to Position Survey 20 actually had four competencies ranked as

"very important". This was interpreted as meaning that only customer service was truly "very important", because the competencies of "persuasion", "interpersonal skills", and "goal orientation" were never ranked at level 1 by either respondent. The summary of competencies reprinted text files regarding the top seven ranked competencies by the respondents.

In comparison, FIG. 8 had 19 "very important" competencies. However, again, only the top seven were summarized.

FIG. 9 also had one "very important" competency whereas FIG. 10 has three.

Note also that Position Report 30 can contain other information. As shown in FIGS. 8 10, work environment (behavioral related characteristics for the position) can be summarized as can attitude or values related characteristics.

In addition, specific interview questions can be generated from text files 16 relative to each of the competencies determined to be most important for the position.

It can therefore be seen that the Position Survey, probing respondents for behaviors and values related competencies from the selected Set of Competencies, allows a definition of the job to be created in a Position Report 30. The job thus quantified, is defined in terms of the type, the inherent behaviors of the person, and the attitudes or values of the person, that would provide superior performance for the job. This is different from evaluating a resume, or evaluating a person based just on interview. It is deriving a description of the job itself by listening to the behavioral and values traits that are articulated in the answers to the Position Survey by persons who do perform well in the job.

Once the most important competencies are identified for the job, a strategy for finding the correct and best candidates for the job can be created. Behavioral and attitude characteristics are summarized and listed in the Position Report. Interview questions are even created.

FIG. 2 summarizes by flowchart for the previously described process. The actual position is first identified (50). Preferably, one to ten persons who clearly understand the position are selected to take Position Survey 20 (52).

If Position Survey 20 is available in hardcopy or a form that can be directly displayed to the respondents (54), the appropriate Position Survey 20 is selected (56), printed (possibly from an Internet site) (58), copies are made for the appropriate number of persons (60) and an orientation session is held (62).

Selected persons take the questionnaire (64, 66, and 68) and a "Position Folder" is created (70) to hold the questionnaires.

The responses of the respondents can be keyed into a computer (72) or stored on a storage medium such as a diskette. The responses in electronic form could be sent via Internet (74) or mailed (76) for processing.

Alternatively, the respondents could be given electronic versions of Position Survey 20 on diskette. They could electronically complete the survey, the diskettes could be collected, and either electronically or physically sent for processing by computer 12.

(6) Optional Debriefing

FIG. 11 illustrates how Position Report 30 can be handled. The entity interested in the Position Report 30 (for example the company) would receive report 30 (90) and review the report (92). If there is no disparity on respondents' rankings or if any disparity is not of concern (94) the end user or customer can use the report for job description (120), future planning (122) or interviewing (112).

Note, however, that it is contemplated that a customer may want to meet with respondents to Position Survey 20 after it has been completed (96), review the definitions of competencies (98) and get an agreement on the most important competencies for the position (100) before using Position Report 30 further.

As shown in FIG. 11, Position Report 30 could even be used to change the job description (114, 116, 118, 130). Still further, it can be used to weigh competencies (106) as will be described later.

If a disparity in rankings is of concern, a meeting with respondents can take place (124) and the process repeated (126) to try to get better consensus (128).

F. Alternatives, Features, Options

The included preferred embodiment is given by way of example only, and not by way of limitation to the invention, which is solely described by the claims herein. Variations obvious to one skilled in the art will be including within the invention defined by the claims.

For example, surveys regarding other competencies or hard skills could be added to Position Survey 20 and Position Report 30. This could also assist an interviewer, or help define a job.

Additionally, as stated previously, live discussion or debriefing of a Position Report with respondents or other parties could be conducted to fine-tune or alter a description of the job. It is not required.

Still further, after obtaining a definition of a job through use of a Position Survey, and then producing a Position Report, other actions related thereto could be taken, such as are discussed below.

(1) Personal Competency Inventory (PCI)

FIG. 12 sets forth a hypothetical Personal Competency Inventory. Such an inventory is focused upon gaining information from a potential employee.

A first section (FIG. 12 B) asks the person to characterize how he/she thinks others would describe his/her behaviors.

Second 2, FIGS. 12C 12H, probe the person's feelings or beliefs about different job related situations, while section 3 (FIGS. 12G 12K) directly probe the person's career accomplishments related to our competency model.

As shown in handwriting to the right of the questions in sections 2 and 3 of the PCI of FIG. 12, the relationship of certain questions to certain competencies from the Set of Competencies is set forth. The alpha-numeric pair coded next to question in Personal Competency Inventory 22 are pre-correlated to the twenty-three Competencies from the Set of Competencies, i.e. P20 relates to the twentieth listed Competency in the Set of Competencies listed earlier.

FIG. 13 illustrates the number of questions from PCI sections 2 and 3 that relate to which Competencies of the Set of Competencies. The PCI is utilized to try to gauge a potential employee's characterization of his or her own competencies (related to the Set of Competencies).

(2) Personal Competency Inventory Report

FIG. 14 illustrates the results of an evaluation of Personal Competency Inventory 22 of FIG. 12. The self-perceived competencies of the potential employee are ranked in order based on how the person answered the questions of sections 2 and 3 of the PCI.

From the Personal Competency Inventory Report 32, an employer can compare the same with a Position Report 30. The employer can select candidates for the position based on the highest correlation between report 30 and report 32. Report 30, if it includes interview questions, can then be used advantageously by the employer to further probe whether the selected candidates fit the competency requirements of Position Report 30.

Therefore, by utilizing both reports 30 and 32, an employer is given the tools to evaluate perspective employees based on the Set of Competencies related to behavior and values and the competencies deemed by incumbents in the position that perform at a high level, to be the most important such competencies.

(3) Feedback Survey

It can also be advantageous for a company to track the performance of an employee. System 10 allows this as follows. Periodically, an employee functioning in a position, as well as others such as a superior, one or more subordinates, or one or more peers, can take a Feedback Survey such as shown in FIGS. 15 17. The competencies previously described are used to evaluate present employees using the Feedback Survey.

(4) Feedback Report

The answers to Feedback Reports 24 of FIGS. 15 17 can then be compiled in a Feedback Report 34 such as shown in FIGS. 18 and 19. The views of others regarding the employee, as well as the employee's own use, are then quantified. Variations in those results can then be compared. This can be very helpful in assisting the employee develop the competencies most important for the job. It can also be used to determine whether a certain employee is not the correct fit for a job.

(6) Interview Candidate Record

FIGS. 20 22 illustrate forms that can be used by an interviewer while interviewing several different candidates for a position. FIGS. 20 and 21 are hypothetical examples for two different candidates for the same job. The top five competencies from the Position Report 30 are set forth in the Interview Candidate Record. Weighting of the importance of the competency to other competencies is set forth, as well as a ranking from the personal competency index taken by the employee.

A weighting result is achieved by multiplying the two. Summation of those products gives a total score for the candidate. The form also allows the interviewer to write notes regarding the rating for future reference. Finally, FIG. 23 illustrates a comparison chart of the top five competencies for each of the candidates to assist in a selection process for the position.

* * * * *