

AN EVALUATION OF A COMPETENCY MODEL DEVELOPED AND IMPLEMENTED FOR EXECUTIVES AT A THAI SERVICE BUSINESS STATE ENTERPRISE

Rungsiyaporn Mitaree, Ph.D.

The Institute of International Studies
Ramkhamhaeng University

ABSTRACT

This study was aimed at evaluating the competency model implemented by a Thai service business state enterprise. There were 688 respondents who participated in answering the questionnaire. The demographic factors of all respondents were classified into genders, educational levels, numbers of years of service, employee code level 8 to 10, and salary increments. The 14 research questions and their hypotheses were examined to compare the differences between self assessment and the standard requirement of competencies, and the correlation between each demographic factor to the average gap of all 14 items of Basic and Core Competencies from the Competency Profile set forth by the organization. The tools for testing 14 hypotheses were comparison of means (t-test), one way ANOVA (F-test), Scheffe, Tamhane, and Pearson's correlation coefficient.

INTRODUCTION

It is undeniable that one of the most challenging tasks that helps every organization to reach its goal is putting the right person on the right job. In other words, a wrong move on this part can mean loss of productivity in that particular organization, and respectively, higher turnover, lower worker morale, and most often, troublesome lawsuits are ultimately brought by disgruntled employees. To improve performance, the company should use the behavioral characteristics of superior performers as their "template," or "blueprint," for employee selection and development. Failure to do so is essentially to select and train to an organization's average level of performance (Spensor & Spensor, 1993). To help find an appropriate answer in upgrading employees' performance in reaching all the outstanding goals, the organization needs to develop a competency model and apply it. To be effective in competency modeling, the human resource management needs to understand thoroughly the concept of competency.

As stated by Spensor & Spensor (1993), competency is an underlying characteristic of an individual that is causally related to criterion - referenced effective and/or superior performance in a job or situation.

The competencies of individuals could be related to their performance in a particular job. A person could be assessed on the basis of his/her ability to carry out the functions required in a specific role. Such an assessment would be of assistance in evaluating a person's performance, and in determining a future career path (McClelland, 1973). Competency-based selection predicts superior job performance and retention - both with significant economic value to organizations - without race, age, gender, or demographic bias. The competency approach provides a human resource method broadly applicable to selection, career path, performance appraisal, and development in the challenging years ahead.

The word competency is used in very different ways by Human Resource experts and business strategists. The literature in relation to the term "competency" certainly appears confusing and contradictory, the term being over defined rather than ill defined. Historically, competency has been used to refer to individual characteristics. But Harvey (1991) prefers using the word skills over competencies when referring to individual characteristics used to do a job. However, Parry (1996, p.50) stated that competency refers to a "cluster of related knowledge, skills and attitudes that affects a major part of one's job (a role

or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development". Whereas psychologist William James said that the first rule for scientists should be that "A difference which makes no difference is no difference". That is why a characteristic or credential that makes no difference in performance is not a competency and should not be used to evaluate people. Human resource practitioners often think of competency as describing the characteristics of a person.

It has become evident over the past few years that the quality of a company's work force is its most important competitive advantage (Jones, 1996, p.22). Workforce development refers to the process of responding to the education and training needs of employees by adapting traditional schedules, content or delivery formats. If the proposition that people are the organization's most valuable asset is sustainable, then we have to understand how these assets are acquired, retained and improved. Especially in the service business industry, the company believes its personnel will become "true professionals, capable of providing polite and pleasant service and keeping their clients' satisfaction in mind at all times". Within any private or state enterprise, working on competency is a competitive tool to upgrade the organization to reach its stated goals.

Purpose of the study

This study is aimed at evaluating a competency model developed and implemented for executives at a Thai service business state enterprise, so as to find an appropriate answer to implementing a career succession plan for the organization. Other objectives of the study are to see how the competency model developed and implemented by the organization can be fitted to Thai culture, and to test whether there are any gaps between the self assessment competency and the required competency standard set forth by the organization.

LITERATURE REVIEW

Literature relevant to the competency assessment method exists in abundance in organizational management. The McClelland/McBer job competence assessment methodology developed by David

McClelland, pioneer in the area of competency research and testing, and by the McBer/Hay Group, the widely respected international consulting firm that specializes in this fast growing field, is an accurate and unbiased approach in predicting job performance and success. Data collection methods vary according to which style of competency model is being used. While using Behavioral Event Interview (BEI), superior and average performers are interviewed using the in-depth "Behavioral Event Interview" technique developed by McClelland and his colleagues. The BEI method is the heart of the Job Competency Assessment process. This method includes "thematic appreciation test (TAT)" probes that yield data about the interviewee's personality and "cognitive style" and is said to be the most difficult and creative part of the competency analysis process.

In 1981, Richard Boyatzis reanalyzed the original data - transcripts of behavioral event interviews, from a number of competency studies of managers and found a set of competencies that consistently distinguished superior managers across organizations and functions. He and his colleagues at McBer made an attempt to scale competencies on a conceptual rather than empirical basis in a generic form which is called The Competency Dictionary. The dictionary presents competencies in scales designed to cover behavior in a wide range of jobs, and to be adapted for many applications.

The evolution of McClelland's studies led to the Job Competence Assessment (JCA), that briefly stated, is based on the assumption that the best way to identify knowledge, skills, and abilities, or other characteristics of the effective performer is to identify effective performers, study their behaviors on the job, determine what distinguished them from less effective performers, and then identify the knowledge, skills, and abilities implied by those behaviors.

RESEARCH METHODOLOGY

Developing the Competency Model

The Job Competence process in the Cullen et al., (1981) study involved six steps; these steps will be used in developing a competency model in our study and will be defined explicitly in our research methodology as follows:

1. The identification of the top performing

management consultants through a variety of techniques such as peer or supervisions nomination or evaluation. For our study, 1,434 top executives level 8-9-10 were requested to join 23 seminars for developing strategic competencies.

2. The identification of performance characteristics by a panel of experts. At this stage, about 150 top executives formed a summative committee. A list of key tasks from the Competency Dictionary was developed along with a list of characteristics of the persons who did the job in an exceptional manner.

3. The involvement of the behavioral event interview, in depth interviews with average and outstanding management consultants.

4. Subjecting the data to thematic analysis in which themes were extracted that differentiated the average from the above average.

5. The validation of the model.

6. The application of the model.

The competencies listed in the modified model were comprised of 2 types of Competencies which were 3 items of Basic Competencies and 11 items of Core Competencies. Functional Competencies that are directly related to the complexity and each scope of work performed were excluded.

Research Questions

Three research questions used to measure the overall differences in the gap between standard Basic and Core Competency levels and self assessment Basic and Core Competency levels between genders, educational levels, years of service, employee code level 8-9-10, and salary increments of the top management executives of a service business state enterprise were listed below:

1. What are the differences in the gap between each standard core competency level and self assessment core competency level between genders?

2. What are the differences in the gap between standard competency level and self assessment competency level between females with different employee code levels?

3. What is the correlation between average annual numbers of salary increment and the average competency gap for males with different employee code levels?

Justification of the study

The questionnaire used for this study was based on 14 items of Basic and Core competencies. There were 688 top executives management level 8-9-10 responded. They were classified according to genders, educational levels, years of service, and salary increments. Each executive was asked to fill in the questionnaire. Each response was then compared to the standard capability requirement to find gaps.

Data analysis method

There were 3 data analysis methods used to test the hypotheses.

1. T-test for significance was used to test hypothesis 1.

2. One-way ANOVA, F-test for overall significance was used to test hypothesis 2.

3. Pearson's correlation coefficient was used for hypothesis 3 to measure the relationship between 2 variables.

All evaluation used a significance level of $\alpha = 0.05$ as an entrance for rejection of the null hypotheses.

ANALYSIS AND PRESENTATION OF FINDINGS

Test of Validity and Reliability

Since the modified competency model was developed by the research unit of the organization, the questionnaire was then tested to find its reliability and the validity. Reliability analysis test for all 14 items of Basic (3 items) and Core (11 items) Competencies used the technique of Cronbach's Alpha Coefficient. The result of the total 14 items alpha coefficient equaled 0.890 as shown in Table 1.

Table 1: Reliability Test for All Items of Competencies

	Alpha Coefficient
Basic Competency (3 items)	0.423
Core Competency (11 items)	0.893
Total (14 items)	0.890

Validity test was done by using factor analysis to find out the rotated component matrix as shown in Table 2.

Table 2: Two Factors Rotated Component Matrix

Competency	Component	
	1	2
b1 English & Thai language skills	0.545	
b2 Personal Computer skills		0.457
b3 Interpersonal Understanding	0.829	
c1 Team Work		0.720
c2 Strategic Agility	0.778	
c3 Customer Service Orientation	0.547	
c4 Ethics, Integrity & Trust		0.798
c5 Leadership	0.657	
c6 Perspective	0.723	
c7 Achievement Oriented	0.572	
c8 Business Acumen	0.695	
c9 Directing Others	0.647	
c10 Career Ambition		0.715
Cc11 Leading Change	0.761	

The two tests showed that the questionnaire was reliable and valid.

Hypotheses Testing

Hypothesis 1 (H1)

Hypothesis 1 was a comparison of gaps between each standard core competency level and self assessment core competency level between males and females. The null and research hypotheses were stated as follow:

H_{01} : There is no difference in the gap between each standard core competency level and self assessment core competency level between genders.

H_{a1} : There are differences in the gap between each standard core competency level and self assessment core competency level between genders.

A t-test for independent samples was conducted to determine the significance of the difference in the gap. As shown in Table 3, significant differences in the gap between each standard core competency level and self assessment core competency level between genders were found. Therefore, the null hypothesis 1 was rejected.

Table 3: Difference in the gap between each standard core competency level and self assessment core competency level between genders

	gender	N	Mean	Std.Deviation	t	Sig.
c1	male	341	-.1466	.65230	-0.527	0.599
	Female	347	-.1182	.76058		
c2	male	341	-.3314	.71033	3.479	0.001*
	Female	347	-.5476	.90593		
c3	male	341	-.2287	1.03207	1.254	0.210
	Female	347	-.3343	1.16948		
c4	male	341	.1906	.67434	-0.537	0.591
	Female	347	.2190	.71190		
c5	male	341	-.0850	.63832	1.880	0.061
	Female	347	-.1873	.78059		
c6	male	341	-.1584	.65854	2.392	0.017*
	Female	347	-.2853	.73074		
c7	male	341	.0880	.62629	0.871	0.384
	Female	347	.0432	.71796		
c8	male	341	-.5865	.83789	1.032	0.302
	Female	347	-.6571	.94989		
c9	male	341	-.0762	.62783	1.182	0.238
	Female	347	-.1383	.74368		
c10	male	341	-.1026	.75811	0.879	0.380
	Female	347	-.1556	.82167		
c11	male	341	-.2727	.80373	1.892	0.059
	Female	347	-.3977	.92355		

Hypothesis 2 (H2)

Hypothesis 2 was a comparison of gaps between each standard competency level and the self assessment competency level between females with different employee code levels. The null and research hypotheses were stated as follows:

Ho₂: There is no difference in the gap between standard competency level and self assessment competency level in females with different employee code levels.

Ha₂: There are differences in the gap between standard competency level and self assessment competency level in females with different employee code levels.

As shown in Table 4, significant differences in the gap between each standard competency level and self assessment competency level in females with different employee code levels were found. Therefore, the null hypothesis 2 was rejected.

Table 4 Difference in the gap between the standard competency level and the self assessment competency level between females with different employee code levels

competency	employee code levels	N	Mean	Std. Deviation	F	Sig.
b1	level 8	268	-0.2537	0.66689	18.967	0.000*
	level 9	71	-0.7887	0.65281		
	level 10	8	-0.6250	0.51755		
b2	level 8	268	-0.5933	0.93750	0.853	0.427
	level 9	71	-0.4507			
	level 10	8	-0.3750			
b3	level 8	268	0.1604	0.69266	17.363	0.000*
	level 9	71	-0.3521			
	level 10	8	0.0000			
c1	level 8	268	-0.0149	0.72912	11.917	0.000*
	level 9	71	-0.4930			
	level 10	8	-0.2500			
c2	level 8	268	-0.6381	0.89921	6.436	0.002*
	level 9	71	-0.2113			
	level 10	8	-0.5000			
c3	level 8	268	-0.3806	1.18855	0.931	0.395
	level 9	71	-0.1831			
	level 10	8	-0.1250			
c4	level 8	268	-0.3358	0.73890	17.673	0.000*
	level 9	71	-0.1972			
	level 10	8	-0.0000			
c5	level 8	268	-0.2127	0.78104	0.624	0.536
	level 9	71	-0.0986			
	level 10	8	-0.1250			
c6	level 8	268	-0.3060	0.72129	0.682	0.506
	level 9	71	-0.1972			
	level 10	8	-0.3750			
c7	level 8	268	0.0336	0.73106	0.155	0.856
	level 9	71	0.0845			
	level 10	8	0.0000			
c8	level 8	268	-0.7164	0.94502	2.349	0.097
	level 9	71	-0.4648			
	level 10	8	-0.3750			
c9	level 8	268	-0.1642	0.73636	1.563	0.211
	level 9	71	-0.0141			
	level 10	8	-0.3750			
c10	level 8	268	-0.0597	0.82799	10.045	0.000*
	level 9	71	-0.5352			
	level 10	8	0.0000			
c11	level 8	268	-0.4739	0.93780	4.143	0.017*
	level 9	71	-0.1268			
	level 10	8	-0.2500			

Hypothesis 3 (H3)

Hypothesis 3 was used to find a correlation between average annual numbers of salary increment and the average competency gap for males with different code levels. The null and research hypotheses were stated as follows:

H_{03} : There is a negative or no correlation between average annual numbers of salary increment and the average competency gap for males with different employee code levels.

H_{a3} : There is a positive correlation between average annual numbers of salary increment and the average competency gap for males with different employee code levels.

Pearson's correlation coefficient was used to measure the relationship between 2 variables. As shown in Table 5-7, correlation between average annual numbers of salary increment and the average of all 14 items of competency gap for males in all 3 code levels had significant values higher than $\alpha = 0.05$. Therefore, the null hypothesis 3 was not rejected.

Table 5 Correlation between salary increment and competency of employee code level 8 of male executives

	Basic competency			Core competency										
	b1	b2	b3	c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11
Salary Increment	-0.110 (0.257)	-0.034 (0.729)	-0.205* (0.033)	-0.104 (0.282)	-0.017 (0.864)	-0.136 (0.159)	-0.107 (0.270)	0.041 (0.672)	-0.017 (0.864)	0.002 (0.984)	-0.036 (0.714)	0.032 (0.745)	-0.059 (0.542)	0.063 (0.520)

Table 6 Correlation between salary increment and competency of employee code level 9 of male executives

	Basic competency			Core competency										
	b1	b2	b3	c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11
Salary Increment	-0.224 (0.196)	-0.116 (0.507)	-0.114 (0.514)	-0.015 (0.934)	-0.033 (0.853)	-0.111 (0.526)	-0.415* (0.013)	-0.203 (0.242)	-0.042 (0.809)	-0.132 (0.448)	-0.159 (0.360)	-0.109 (0.533)	-0.131 (0.454)	-0.102 (0.562)

Table 7 Correlation between salary increment and competency of employee code level 10 of male executives

	Basic competency			Core competency										
	b1	b2	b3	c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11
Salary Increment	-0.500 (0.391)	0.000 (1.000)	-0.645 (0.239)	-0.645 (0.239)	0.000 (1.000)	0.000 (1.000)	-0.791 (0.111)	-0.645 (0.239)	-0.423 (0.478)	0.271 (0.659)	-0.699 (0.189)	0.000 (1.000)	-0.791 (0.111)	0.000 (1.000)

CONCLUSIONS AND IMPLICATIONS

Conclusion

The results from testing 3 hypotheses could be enumerated according to the variables as follows:

Gender: Male executives have better Strategic Agility (c2) and Perspective/Vision (c6) than females.

Employee code level: Executives level 8 have higher Thai & English language skills (b1) than executives level 9.

Executives level 8 have the highest Interpersonal Understanding skills (b3) followed by executives at levels 10 and 9, respectively.

Executives level 8 have higher Teamwork/Team leadership (c1) than executives level 9.

Executives level 8 have lower Strategic Agility (c2) than executive level 9.

Executives level 8 have the highest Ethics Integrity & Trust (c4) followed by executives level 10 and 9, respectively.

Executives level 8 and 10 are more competent in Career Ambition (c10) than executives level 9.

And executives level 8 have lower competency in Leading Change/Change Agent (c11) than executives level 9.

Salary Increment: There is a negative correlation between salary increment and Interpersonal Understanding (b3) gap for male executives level 8.

There is also a negative correlation between salary increment and Ethics, Integrity & Trust (c4) gap for male executives level 9.

Lastly, there is no correlation between salary increments and the average competency gap for male executives level 10.

Implications for Management

The results from the study showed that jobs with different attributes need different kinds of executives. Assigning tasks that are appropriate to the ability of each executive will be a good rule in matching the right person to the right job. Improving and maintaining executives within the organization through an appropriate motivational plan are also important to Human Resource Management. This study can be used to improve human resources management of a service business state enterprise or other enterprises in related fields. It studies executives' competency and provides guidelines for a more efficient competency system development within the organization. From the

study, salary increment has an inverse relationship with competency. In order to promote the employees in this situation, salary will be less effective. Therefore, a proper reward system should then be implemented.

A Competency Assessment program in an organization requires most employees' contributions and managerial budget, a successful program should be done under close supervision of specialists, whether hiring an outside consultant or using personnel within the organization itself. The modified model in this study is set under a true theoretical base that other organizations can bring into use as a new knowledge or application for their own competency system development.

Limitations

The Basic and Core Competencies characterized in the study might not be operative in certain situations since the study was done under a huge service business state enterprise and it covered top executives only. There is a possibility for the respondent to over or underrate him/herself. The researcher must note that competency modeling requires substantial budgets and cooperation.

Implications for Future Research

For any researcher who is interested in a competency modeling study, there are numerous suggestions. For instance, a dyad of peer's or boss's rating and a comparative study of competency gap for teachers and students or others might be interesting. At least, a replication of this research study by using another competency model can be beneficial.

REFERENCES

- Anderson, Sweeney, Williams, (2002). *Statistics for Business and Economics*, 104,565.
- Boyatzis, R.E. (1982). *The Competent Manager: A Model for Effective Performance*. New York: Wiley.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests, *Psychometrika*. 16, 297-334.
- Cullen, B.J., Klemp, G.O., Rossini, L.A., & Sokol, M. (1981). *Competencies of organizational effectiveness consultants in the US Army*. Boston, McBer and Company, Contract #

- MDA903-79-C-0427. US Army Research Institute.
- Dalton, Gene W. and Thompson, Paul H. (1993). *Strategies for Career Management*.
- Flanagan, J.C., & Burns, R. (1955). The employee performance record: a new appraisal and development tool. *Harvard Business Review*. Sept-Oct, 95-102.
- Green, Paul C. (1999). *Building Robust Competencies: Linking Human Resource Systems to Organizational Strategies*. San Francisco: Jossey-Bass Publishers.
- Harvey, R.J. (1991). Job Analysis in M.D. Dunnette and L.M. Hough (Eds.), *The Handbook of Industrial and Organizational Psychology* Vol.2 (2nd ed.). Palo Alto, Calif.: Consulting Psychologists Press.
- James, William: (1978). *The Writings of William James: A Comprehensive Edition*, University of Chicago Press, p. 912. Pragmatism, Essays in Radical Empiricism, and A Pluralistic Universe complete; plus selections from other works.
- Jones, R.T. (1996). The new workplace and lifelong learning. *Community College Journal* 67(2), 20-23.
- Kotter, J.P. (1996). *Leading Change*. Boston: Harvard Business School Press.
- Lawler, E.E., and Ledford, G. (1997). New Approaches to Organizing Competencies: Capabilities and the Decline of the Bureaucratic Model. In C.Cooper and S. Jackson (Eds.), *Creating Tomorrow's Organizations: A Handbook for Future Research in Organizational Behavior*. Chichester, England: Wiley.
- McClelland, D.C. (1973). Testing for competence rather than intelligence. *American Psychologist*. 28, 1-14.
- Parry, S.B. (1996). The Quest for competencies. *Training Magazine*. 33(7), 48-56.
- Robinson, S., & Barberis-Ryan, C. (1995). Competency assessment: A systematic approach. *Nursing Management* 26(2), 40-44.
- Schippmann, J.S. (1999). *Strategic job modeling: Working at the core of integrated human resources*. Mahwah, NJ: LEA.
- Spencer, L.M. & Spencer, S.M. (1993). *Competence at work*. New York: John Wiley.
- Tampoe, M. (1994). Exploiting the Core Competences of Your Organization. *Long Range Planning*. 27(4), 66-77.
- While, A. (1994). Competence versus performance: Which is more important? *Journal of Advanced Nursing* 20(3), 525-531.
- Zabojnik, Jan. (2004) A Model of Rational Bias in Self-Assessments, *Economic Theory*. 23, 52-56.